Enodis
One Company, Countless Solutions

TECHNICAL MANUAL

INSTALLATION MANUAL FOR EXPORT UNITS
SERVICE MANUAL FOR DOMESTIC UNITS

FOR JACKSON MODELS:

CONSERVER XL

CONSERVER XL2

CONSERVER XL2-CML

CONSERVER XL2-CMR

Jackson
An Enodis Company

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REVISION	REVISION DATE	MADE BY	APPLICABLE ECN	DETAILS
F	05-07-04	MAW	7040	Added 2nd Enodis Logo. Changed to new layout. Added new parts for the redesigned Conserver XL unit.

CONSERVER XL2-CMR

Conserver XL = Low temperature, chemical sanitizing, single rack dishmachine
Conserver XL2 = Low temperature, chemical sanitizing, dual rack dishmachine
Conserver XL2-CML = Low temperature, chemical sanitizing, dual rack dishmachine with left hand feed through
Conserver XL2-CMR = Low temperature, chemical sanitizing, dual rack dishmachine with right hand feed through

Model:_____

Serial No.:_____

Installation Date:_____

Service Rep. Name:_____

Phone No.:_____

Jackson MSC Inc. provides technical support for all of the dishmachines detailed in this manual. We strongly recommend that you refer to this manual before making a call to our technical support staff. Please have this manual with you when you call so that our staff can refer you, if necessary, to the proper page. Technical support is available from 8:00 a.m. to 5:00 p.m. (EST), Monday through Friday. Technical support is not available on holidays. Contact technical support toll free at 1-888-800-5672. Please remember that technical support is available for service personnel only.

SECTION	DESCRIPTION	PAGE
I.	**GENERAL**	
	Specifications for the Conserver XL	2
	Specifications for the Conserver XL2 Series	3
	Dimensions Conserver XL (Starting with S/N 04D10286)	4
	Dimensions Conserver XL (Prior to S/N 04D10286)	5
	Dimensions Conserver XL2	6
	Dimensions Conserver XL2-CML	7
	Dimensions Conserver XL2-CMR	8
	Table Dimensions	9
II.	**INSTRUCTIONS & OPERATION INSTRUCTIONS**	
	Installation Instructions	11
	Electrical Installation Instructions	12
	Chemical Dispensing Equipment	13
	Operation Instructions	14
	Cam Timer Operation	16
	Timing Sequence Conserver XL	18
III.	**PREVENTATIVE MAINTENANCE**	20
IV.	**TROUBLESHOOTING SECTION**	22
V.	**PARTS SECTION**	
	Control Box Assembly, Conserver XL	31
	Control Box Assembly, Conserver XL2	33
	Ordering Replacement Wire	35
	Ordering Replacement Hose & Tubing/Conduit & Fittings	36
	8 Cam Timer	37
	Chemical Feeder Pump Assembly	38
	Hood Assembly, Conserver XL (Starting with S/N 04D10286)	39
	Hood Assembly, Conserver XL (Prior to S/N 04D10286)	40
	Hood Assembly, Conserver XL2	41
	Cantilever Arm Assembly, Conserver XL2 Double Bracket Mount	42
	Conserver XL Door & Wrap Assemblies (Prior to S/N 04D10286)	44
	Cantilever Arm Assembly, Conserver XL2 Single Bracket Mount	45
	Wash Tub Assembly, Conserver XL	46
	Wash Tub Assembly (Left Front View), Conserver XL2	47
	Wash Tub Assembly (Right Front View), Conserver XL2	48
	Wash Motor Assembly, Conserver XL	49
	Pump & Motor Assembly	50
	Frame Assembly & False Panel, Conserver XL (Starting with S/N 04D10286)	51
	Frame Assembly & False Panel, Conserver XL (Prior to S/N 04D10286)	52
	Frame Weldment, Conserver XL2 Series	53
	Accumulator Assembly, Conserver XL (Prior to S/N 04D10286)	54
	Accumulator Assembly, Conserver XL2 Series	55
	Incoming Plumbing Assembly	56
	1/2” Water Arrestor Assembly	56
	Solenoid Valve Repair Kits, 3/4”	57
	Vacuum Breaker Repair Kit, 3/4” NPT	57
	Wash Arm /Wash Manifold Assembly	58
	Drain Solenoid Assembly	59
	Miscellaneous Parts	60
	Conserver XL2-CML Assembly Options	61
	Conserver XL2-CMR Assembly Options	63

VI. **ELECTRICAL DIAGRAMS**
Conserver XL (115 Volt, 60 Hz, Single Phase) 66
Conserver XL (220 Volt, 50 Hz, Single Phase) 67
Conserver XL2 Series (115 Volt, 60 Hz, Single Phase) 68

SECTION 1:
SPECIFICATION INFORMATION

CONSERVER XL SPECIFICATIONS

PERFORMANCE/CAPABILITIES

OPERATING CAPACITY (RACKS/HOUR)	
RACKS PER HOUR	37
DISHES PER HOUR	925
GLASSES PER HOUR	925
OPERATING CYCLE (SECONDS)	
WASH TIME	42
RINSE TIME	25
DWELL TIME	23
TOTAL CYCLE TIME	90
TANK CAPACITY (MINIMUM)	
WASH TANK (GALLONS)	1.49
WASH TANK (LITERS)	5.6
WASH PUMP CAPACITY	
GALLONS PER MINUTE	61
LITERS PER MINUTE	231
TEMPERATURES	
WASH---°F (MINIMUM)	120
WASH---°C (MINIMUM)	48.9
WASH---°F (RECOMMENDED)	140
WASH---°C (RECOMMENDED)	60
RINSE---°F(MINIMUM)	120
RINSE---°C(MINIMUM)	48.9
RINSE---°F (RECOMMENDED)	140
RINSE---°C (RECOMMENDED)	60

ELECTRICAL REQUIREMENTS

WASH PUMP MOTOR HORSEPOWER	3/4

NOTE: Typical Electrical Circuit is based upon (1) 125% of the full amperage load of the machine and (2) typical fixed-trip circuit breaker sizes as listed in the NEC 2002 Edition. Local codes may require more stringent protection than what is displayed here. Always verify with your electrical service contractor that your circuit protection is adequate and meets all applicable national and local codes. These numbers are provided in this manual simply for reference and may change without notice at any given time.

VOLTS	PH	HZ	RINSE HEATER RATINGS	TOTAL AMPS	TYPICAL ELECTRICAL CIRCUIT
115	1	60	N/A	12	15 AMP
220	1	50	N/A	8	15 AMP

WATER REQUIREMENTS

INLET TEMPERATURE (MINIMUM)	120°F
INLET TEMPERATURE (MINIMUM)	48.9°C
INLET TEMPERATURE (RECOMMENDED)	140°F
INLET TEMPERATURE (RECOMMENDED)	60°C
GALLONS PER HOUR	55.5
LIITERS PER HOUR	210
WATER LINE SIZE NPT (Minimum)	3/4”
DRAIN LINE SIZE NPT (Minimum)	2”
FLOW PRESSURE PSI	20±5
MINIMUM CHLORINE REQUIRED (PPM)	50

NOTE: Always refer to the machine data plate for specific electrical and water requirements. The material provided on this page is for reference only and may be subject to change without notice.

CONSERVER XL2 SERIES SPECIFICATIONS

PERFORMANCE/CAPABILITIES

OPERATING CAPACITY (RACKS/HOUR)	
RACKS PER HOUR	74
RACKS PER HOUR (OPTION)	96
DISHES PER HOUR	1850
GLASSES PER HOUR	1850
OPERATING CYCLE (SECONDS)	
WASH TIME	42
RINSE TIME	25
DWELL TIME	25
TOTAL CYCLE TIME	90
TOTAL CYCLE TIME (OPTION)	72
TANK CAPACITY (MINIMUM)	
WASH TANK (GALLONS)	3.1
WASH TANK (LITERS)	11.7
WASH PUMP CAPACITY	
GALLONS PER MINUTE	61
LITERS PER MINUTE	231
TEMPERATURES	
WASH---°F (MINIMUM)	120
WASH---°C (MINIMUM)	48.9
WASH---°F (RECOMMENDED)	140
WASH---°C (RECOMMENDED)	60
RINSE---°F(MINIMUM)	120
RINSE---°C(MINIMUM)	48.9
RINSE---°F (RECOMMENDED)	140
RINSE---°C (RECOMMENDED)	60

ELECTRICAL REQUIREMENTS

WASH PUMP MOTOR HORSEPOWER	3/4

NOTE: Typical Electrical Circuit is based upon (1) 125% of the full amperage load of the machine and (2) typical fixed-trip circuit breaker sizes as listed in the NEC 2002 Edition. Local codes may require more stringent protection than what is displayed here. Always verify with your electrical service contractor that your circuit protection is adequate and meets all applicable national and local codes. These numbers are provided in this manual simply for reference and may change without notice at any given time.

VOLTS	PH	HZ	RINSE HEATER RATINGS	TOTAL AMPS	TYPICAL ELECTRICAL CIRCUIT
115	1	60	N/A	25	35 AMP

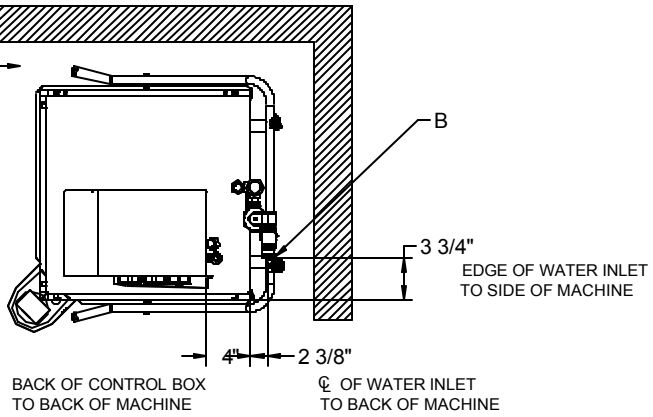
WATER REQUIREMENTS

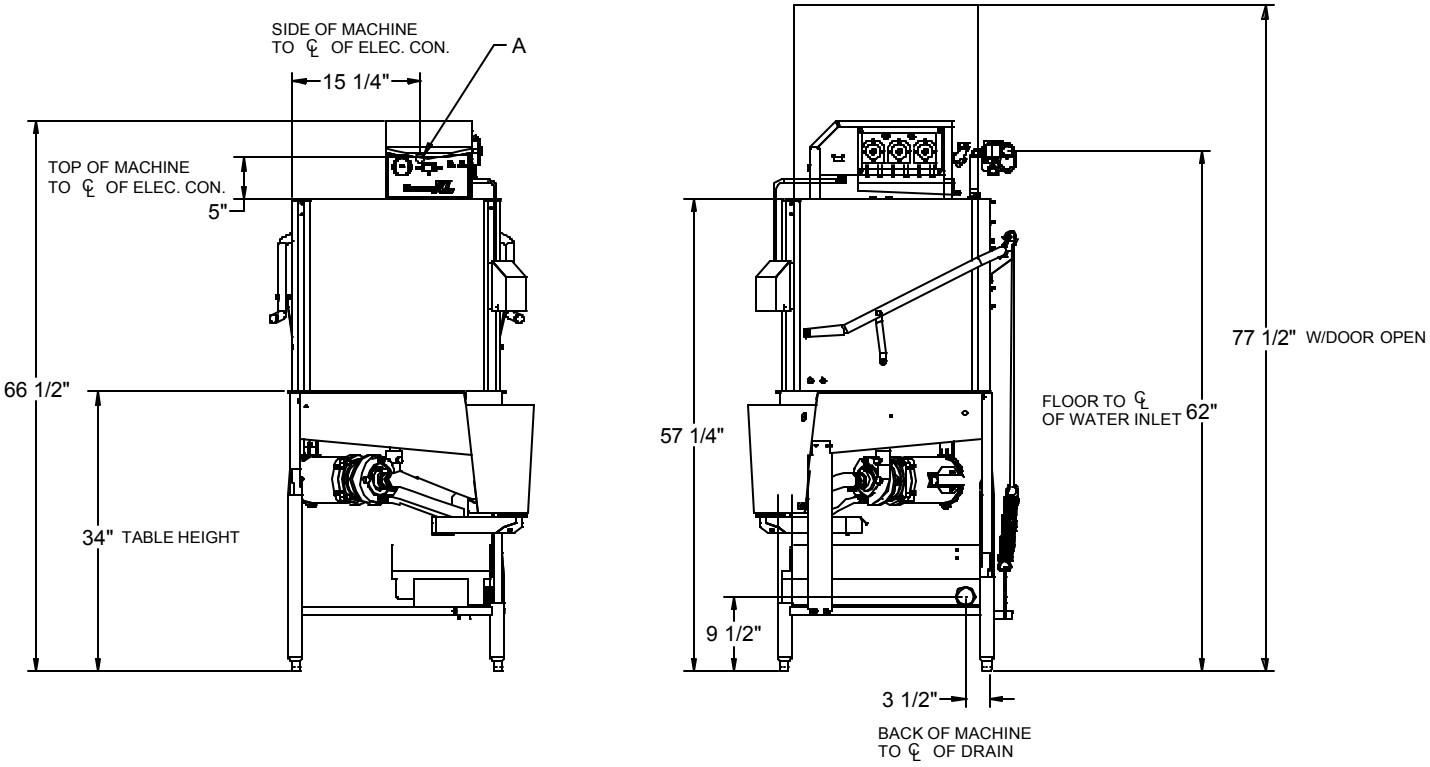
INLET TEMPERATURE (MINIMUM)	120°F
INLET TEMPERATURE (MINIMUM)	48.9°C
INLET TEMPERATURE (RECOMMENDED)	140°F
INLET TEMPERATURE (RECOMMENDED)	60°C
GALLONS PER HOUR	111
GALLONS PER HOUR (OPTION)	192
WATER LINE SIZE NPT (MINIMUM)	3/4”
DRAIN LINE SIZE NPT (MINIMUM)	2”
FLOW PRESSURE PSI	20±5
MINIMUM CHLORINE REQUIRED (PPM)	50

NOTE: Always refer to the machine data plate for specific electrical and water requirements. The material provided on this page is for reference only and may be subject to change without notice.

DIMENSIONS CONSERVER XL (Starting with S/N 04D10286)

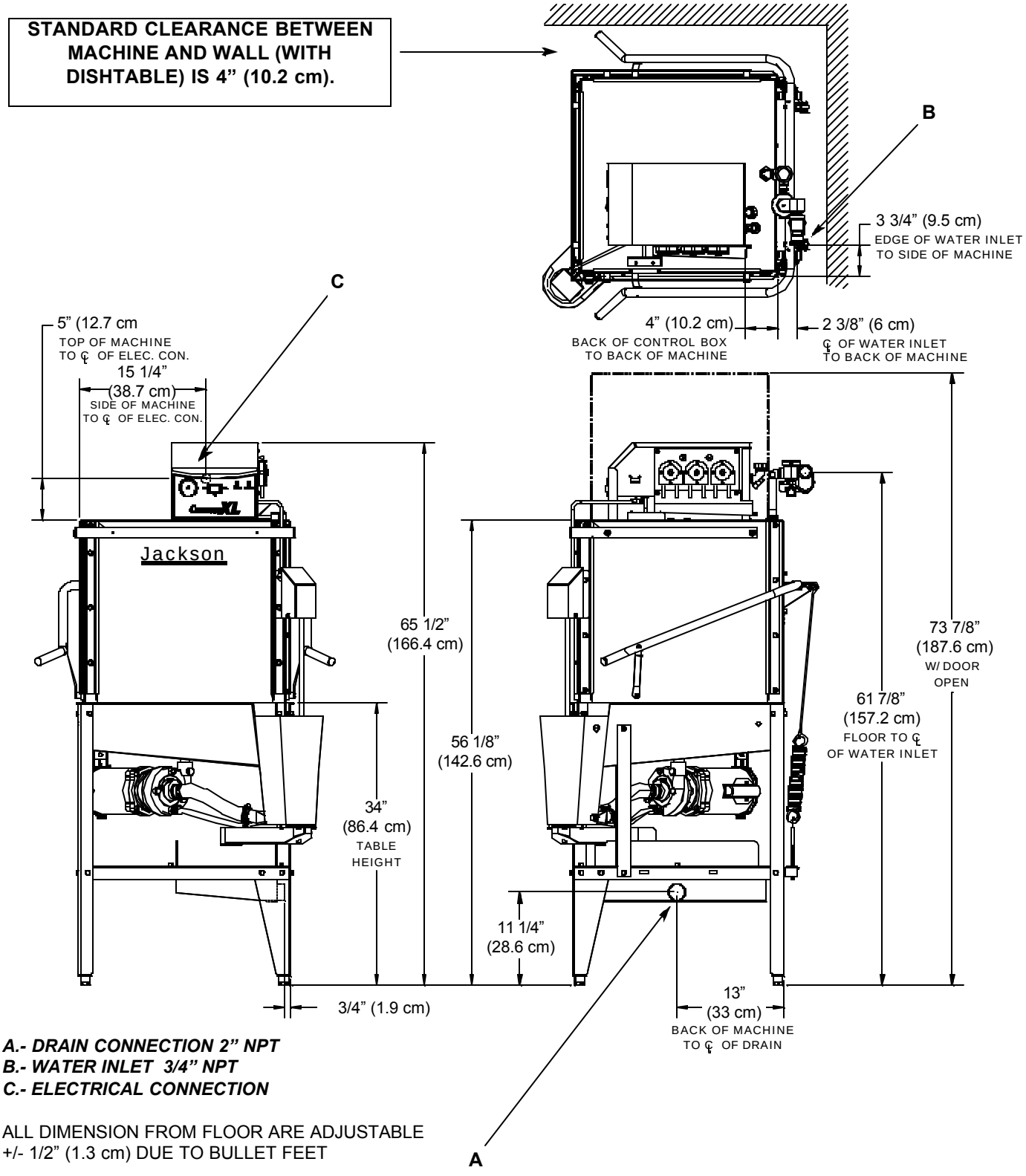
STANDARD CLEARANCE BETWEEN MACHINE AND WALL (WITH DISHTABLE) IS 4"





DIMENSIONS CONSERVER XL (Prior to S/N 04D10286)

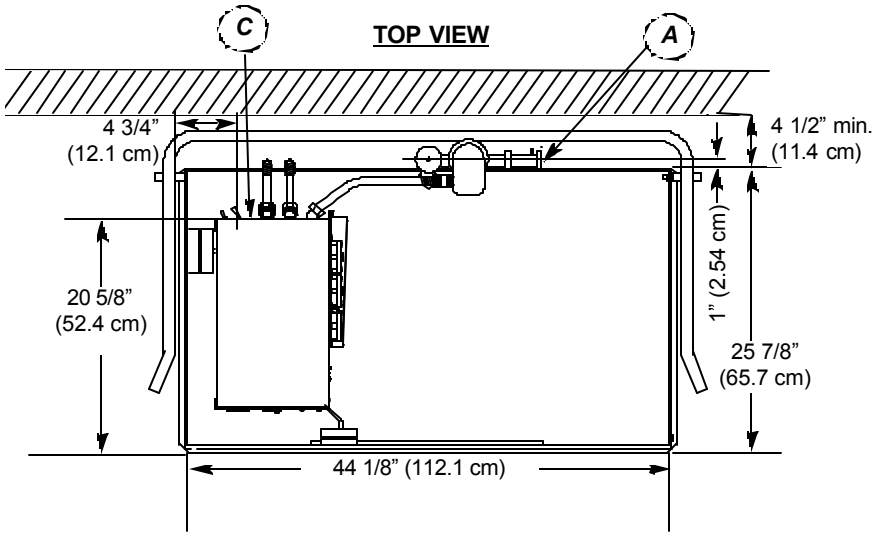
STANDARD CLEARANCE BETWEEN MACHINE AND WALL (WITH DISHTABLE) IS 4" (10.2 cm).



A.- DRAIN CONNECTION 2" NPT
B.- WATER INLET 3/4" NPT
C.- ELECTRICAL CONNECTION

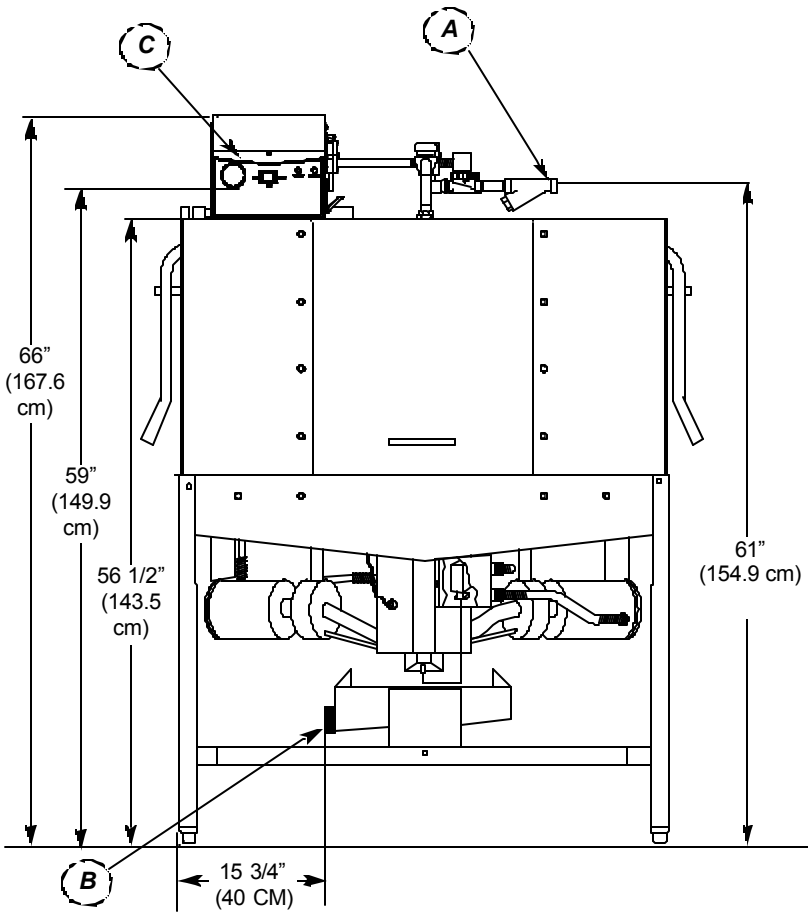
ALL DIMENSION FROM FLOOR ARE ADJUSTABLE
+/- 1/2" (1.3 cm) DUE TO BULLET FEET

DIMENSIONS CONSERVER XL2

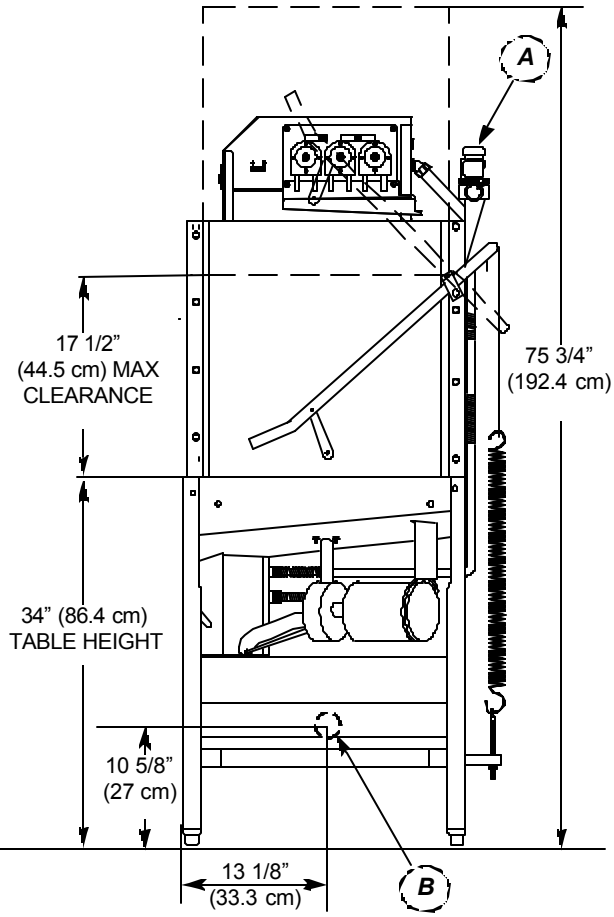


A - WATER INLET - 3/4" NPT
B - DRAIN CONNECTION - 2" NPT
C - ELECTRICAL CONNECTION

ALL DIMENSION FROM FLOOR ARE ADJUSTABLE +/- 1/2" (1.3 cm) DUE TO BULLET FEET.

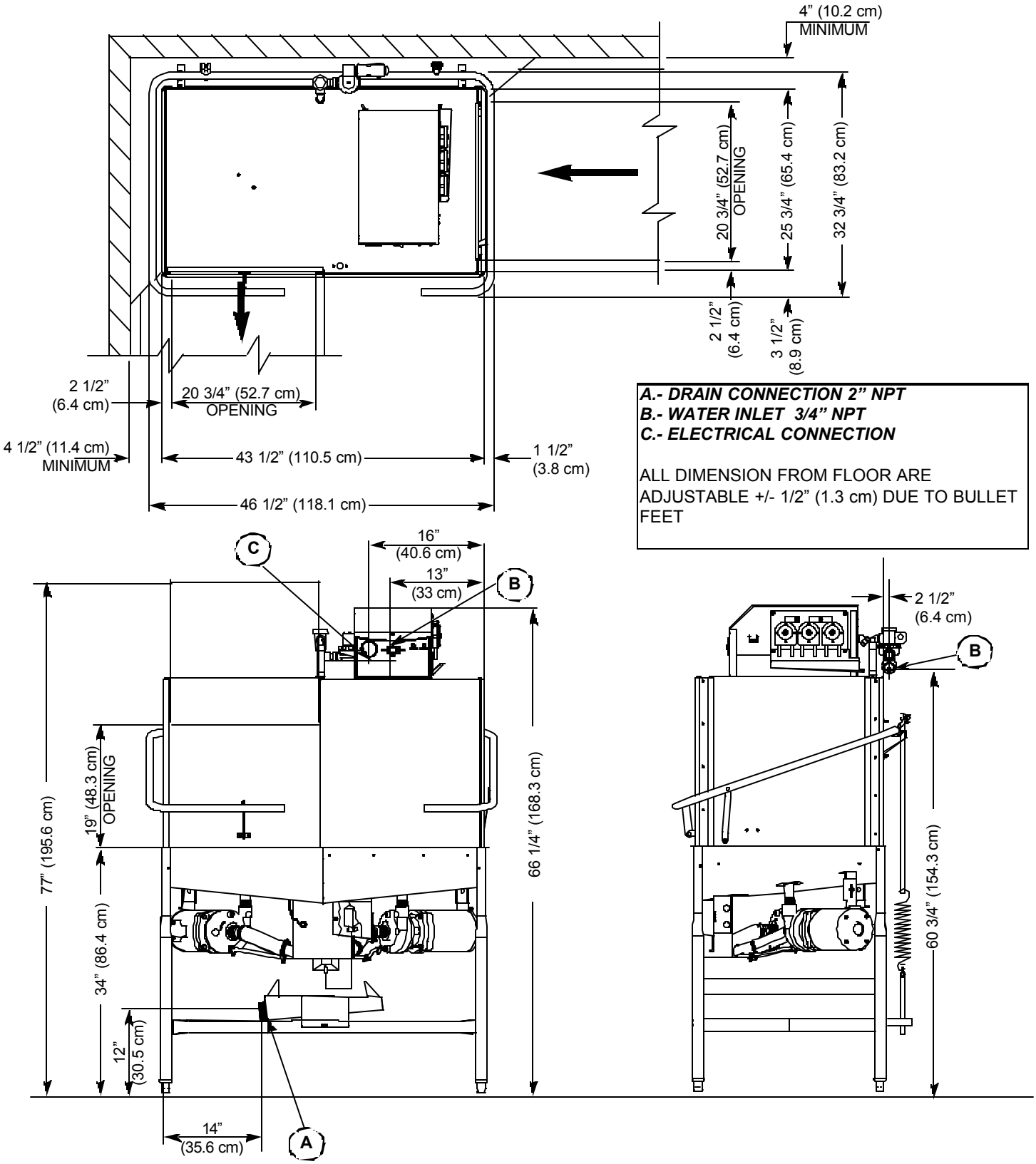


FRONT VIEW

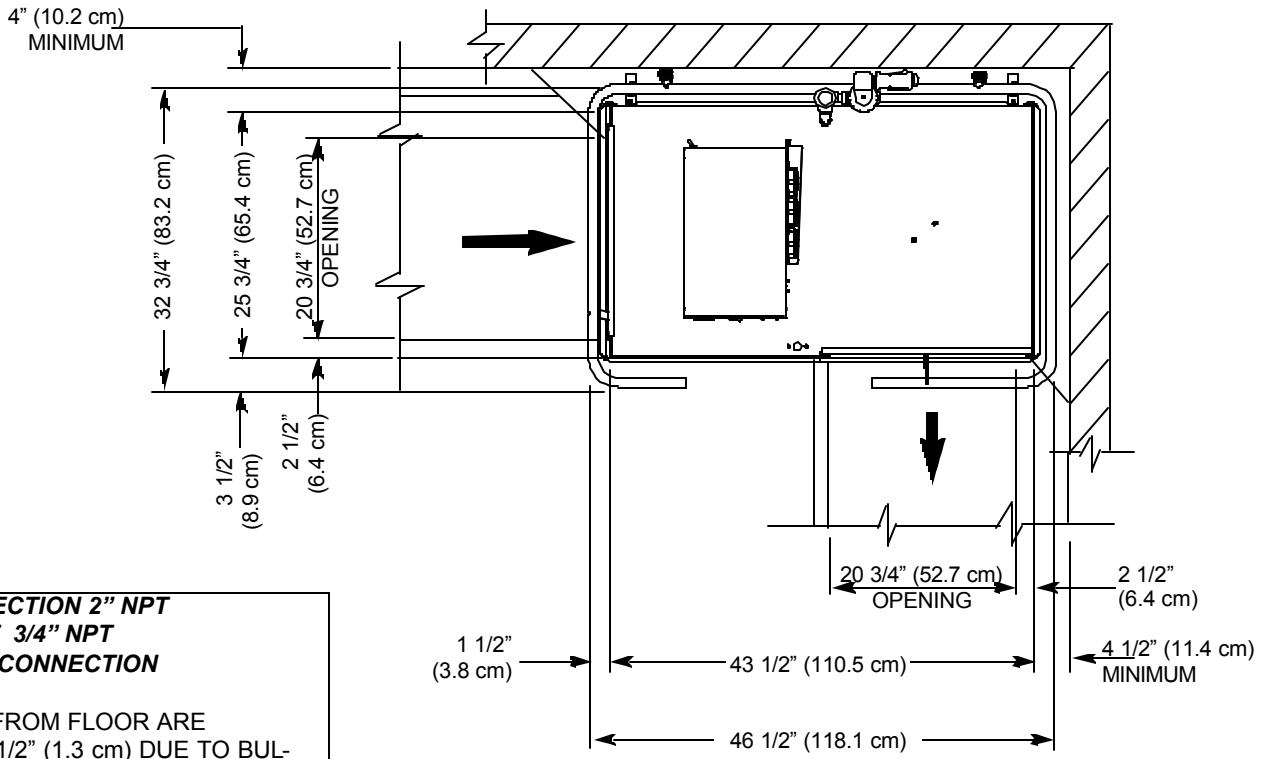


RIGHT SIDE VIEW

DIMENSIONS CONSERVER XL2-CML



DIMENSIONS CONSERVER XL2-CMR



A.- DRAIN CONNECTION 2" NPT
B.- WATER INLET 3/4" NPT
C.- ELECTRICAL CONNECTION

ALL DIMENSION FROM FLOOR ARE ADJUSTABLE +/- 1/2" (1.3 cm) DUE TO BULLET FEET.

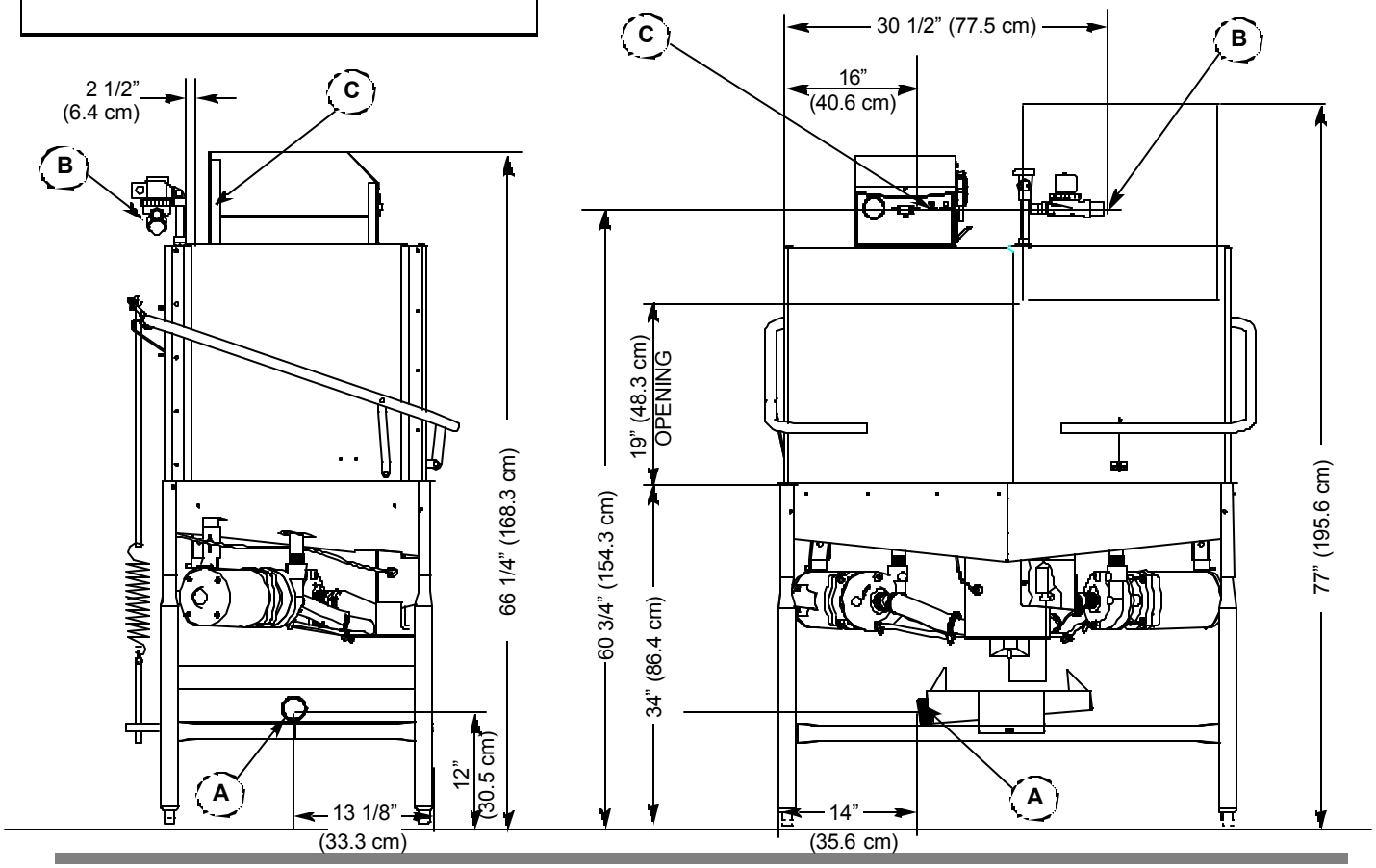


TABLE DIMENSIONS

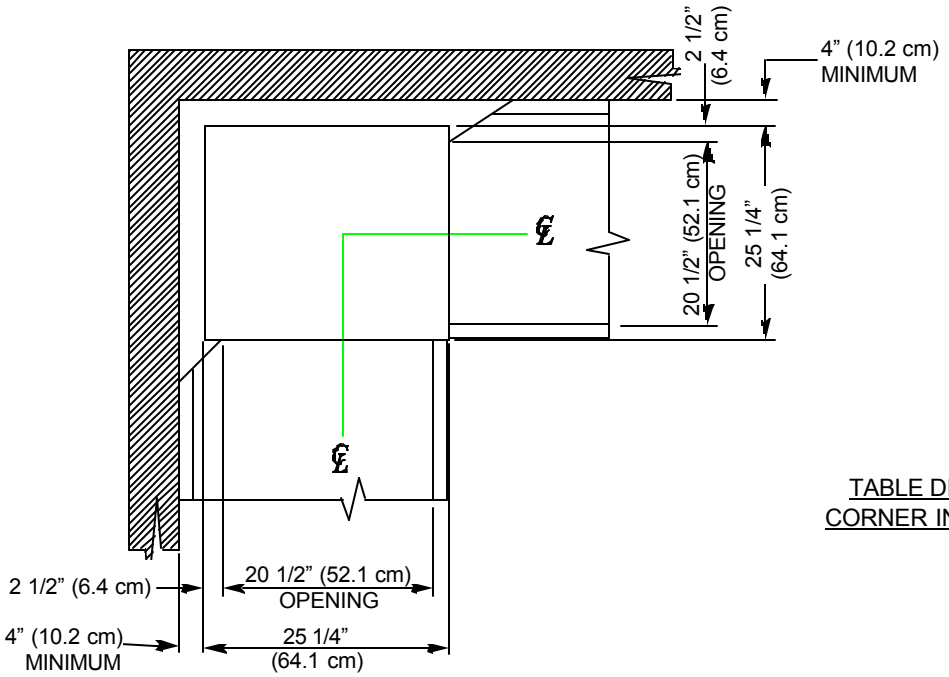


TABLE DIMENSIONS
CORNER INSTALLATION

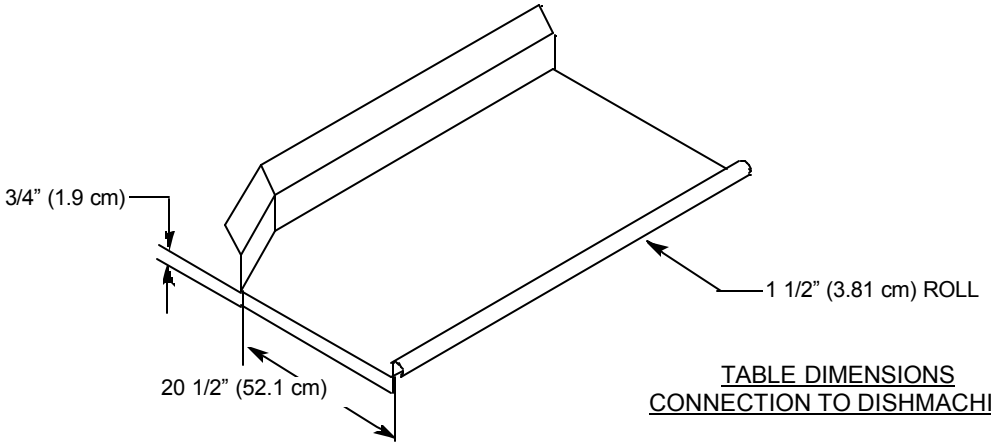


TABLE DIMENSIONS
CONNECTION TO DISHMACHINE

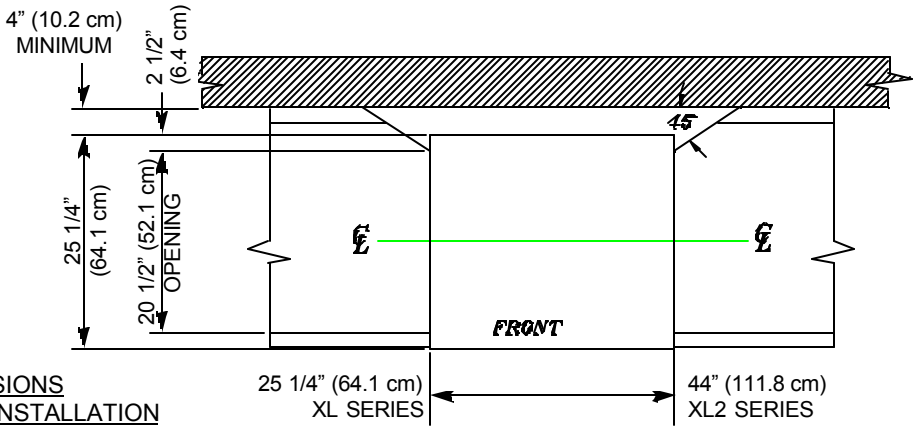


TABLE DIMENSIONS
STRAIGHT THROUGH INSTALLATION

SECTION 2:
INSTALLATION/OPERATION INSTRUCTIONS

INSTALLATION INSTRUCTIONS

VISUAL INSPECTION: Before installing the unit, check the container and machine for damage. A damaged container is an indicator that there may be some damage to the machine. If there is damage to both the container and machine, do not throw away the container. The dishmachine has been inspected and packed at the factory and is expected to arrive to you in new, undamaged condition. However, rough handling by carriers or others may result in there being damage to the unit while in transit. If such a situation occurs, do not return the unit to Jackson; instead, contact the carrier and ask them to send a representative to the site to inspect the damage to the unit and to complete an inspection report. You must contact the carrier within 48 hours of receiving the machine. Also, contact the dealer through which you purchased the unit.

UNPACKING THE DISHMACHINE: Once the machine has been removed from the container, ensure that there are no missing parts from the machine. This may not be obvious at first. If it is discovered that an item is missing, contact Jackson immediately to have the missing item shipped to you.

LEVEL THE DISHMACHINE: The dishmachine is designed to operate while being level. This is important to prevent any damage to the machine during operation and to ensure the best results when washing ware. The unit comes with adjustable bullet feet, which can be turned using a pair of channel locks or by hand if the unit can be raised safely. Ensure that the unit is level from side to side and from front to back before making any connections.

PLUMBING THE DISHMACHINE: All plumbing connections must comply with all applicable local, state, and national plumbing codes. The plumber is responsible for ensuring that the incoming water line is thoroughly flushed prior to connecting it to any component of the dishmachine. It is necessary to remove all foreign debris from the water line that may potentially get trapped in the valves or cause an obstruction. Any valves that are fouled as a result of foreign matter left in the water line, and any expenses resulting from this fouling, are not the responsibility of the manufacturer.

CONNECTING THE DRAIN LINE: The drain for the Conserver XL/XL2 series is a gravity discharge drain. All piping from the 2” MNPT connection on the waste accumulator must be pitched (1/4” per foot) to the floor or sink drain. All piping from the machine to the drain must be a minimum 2” NPT and shall not be reduced. There must also be an air gap between the machine drain line and the floor sink or drain. If a grease trap is required by code, it should have a flow capacity of 5 gallons per minute.

WATER SUPPLY CONNECTION: Ensure that you have read the section entitled “PLUMBING THE DISHMACHINE” above before proceeding. Install the water supply line (3/4” pipe size minimum) to the dishmachine line strainer using copper pipe. It is recommended that a water shut-off valve be installed in the water line between the main supply and the machine to allow access for service. The water supply line is to be capable of 20 ± 5 PSI “flow” pressure at the recommended temperature indicated on the data plate.

In areas where the water pressure fluctuates or is greater than the recommended pressure, it is suggested that a water pressure regulator be installed.

Do not confuse static pressure with flow pressure. Static pressure is the line pressure in a “no flow” condition (all valves and services are closed). Flow pressure is the pressure in the fill line when the fill valve is opened during the cycle.

It is also recommended that a shock absorber (not supplied with the Conserver XL/XL2 series models) be installed in the incoming water line. This prevents line hammer (hydraulic shock), induced by the solenoid valve as it operates, from causing damage to the equipment.

PLUMBING CHECK: Slowly turn on the water supply to the machine after the incoming fill line and the drain line have been installed. Check for any leaks and repair as required. All leaks must be repaired prior to placing the machine in operation.

ELECTRICAL INSTRUCTIONS

ELECTRICAL POWER CONNECTION: Electrical and grounding connections must comply with the applicable portions of the National Electrical Code ANSI/NFPA 70 (latest edition) and/or other electrical codes.

Disconnect electrical power supply and place a tag at the disconnect switch to indicate that you are working on the circuit.

The dishmachine data plate is located on the right side and to the front of the machine. Refer to the data plate for machine operating requirements, machine voltage, total amperage load and serial number.

To install the incoming power lines, open the control box. This will require taking a phillips head screwdriver and removing the one (1) screw on the front cover of the control box. Install 3/4" conduit into the pre-punched holes in the back of the control box. Route power wires and connect to power block and grounding lug. Install the service wires (L1 & N) to the appropriate terminals as they are marked on the terminal block. Install the grounding wire into the lug provided.

It is recommended that "DE-OX" or another similar anti-oxidation agent be used on all power connections.

VOLTAGE CHECK: Ensure that the power switch is in the OFF position and apply power to the dishmachine. Check the incoming power at the terminal block and ensure it corresponds to the voltage listed on the data plate. If not, contact a qualified service agency to examine the problem. Do not run the dishmachine if the voltage is too high or too low. Shut off the service breaker and mark it as being for the dishmachine. Advise all proper personnel of any problems and of the location of the service breaker. Replace the control box cover and tighten down the screws.

This equipment is not recommend for use with deionized water or other aggressive fluids. Use of deionized water or other aggressive fluids will result in corrosion and failure of materials and components. Use of deionized water or other aggressive fluids will void the manufacturer's warranty.

CHEMICAL DISPENSING EQUIPMENT

TO PREPARE PUMPS FOR OPERATION

The Conserver XL dishmachine is supplied with detergent, rinse additive and sanitizer dispensing chemical feeder pumps. Locate the open ends of the chemical tubes with the tube stiffeners and place each one in the appropriate container.

A. **Red** Tubing = **Detergent**
B. **Blue** Tubing = **Rinse Aid**
C. **White** Tubing = **Sanitizer**

PRIMING CHEMICAL FEEDER PUMPS

Chemical feeder pumps need priming when the machine is first installed or if for some reason the chemical lines have been removed and air is allowed to enter.

CAUTION: Water must be in the sump and wash tank prior to the dispensing of chemicals. Sanitizer in concentration is caustic and may cause damage without dilution.

1. Verify that the proper chemical tube stiffener inlet is in the proper container.

2. Use the toggle switches on the right side of control box to prime each pump. There are two (2) switches mounted by the peristaltic-pumps. One will prime the sanitizer pump only, and the second will prime either the detergent or rinse aid pump, depending upon which way it is depressed.

3. To prime the pumps, hold the switch in the momentary position until chemical can be observed entering the sump.

4. Detergent is dispensed as required during the wash cycle by the cam timer. The amount of detergent may need to be increased or decreased depending on water quality and type of detergent. It is adjusted by changing Cam 6 on the cam timer.

5. Rinse additive is dispensed as required into the final rinse. The amount of rinse aid may need to be adjusted depending on water hardness and results. It can be changed by changing Cam 7 on the cam timer.

6. Chlorine based sanitizer is dispensed into the final rinse. The amount of sanitizer may need to be adjusted depending on the concentration and type of sanitizer used. It is adjusted by changing Cam 5 on the cam timer.

WARNING: Some of the chemicals used in dishwashing may cause chemical burns if they come in contact with your skin. Wear protective gear when handling these chemicals. If you do come in contact with these chemicals, immediately flush the affected area with fresh water. Always refer to the chemical agent packaging for safe handling and first-aid instructions.

OPERATION INSTRUCTIONS

PREPARATION: Before proceeding with the start-up of the unit, verify the following:

1. The sump strainer is in place and is clean.

2. The drain stopper is installed.

3. That the wash and rinse arms are screwed securely into place and that their endcaps are tight. The wash and rinse arms should rotate freely.

POWER UP: To energize the unit, turn on the power at the service breaker. The voltage should have been previously verified as being correct. If not, the voltage will have to be verified.

FILLING THE WASH TUB: For the initial fill, close doors and depress and hold the OFF/ON/FILL rocker switch in the FILL position for approximately 8 - 10 seconds. Open the doors and verify that the water level is correct. Hereafter, the water level is controlled by the timer that has been preset at the factory. Verify that the drain stopper is preventing the wash tub water from pouring out excessively. There may be some slight leakage from the drain hole. Verify that there are no other leaks on the unit before proceeding any further. The wash tub must be completely filled before operating the wash pump to prevent damage to the component. Once the wash tub is filled, the unit is ready for operation.

The water level was set at the factory. If the water level is not at the level noted above, it will require adjustment. Check to ensure that the recommended water pressure is being supplied to the machine (20 ± 5 PSI). If the water pressure is correct then the fill valve will need adjustment. Use the following steps to adjust the cam. Turn power off at the machine circuit breaker. Open the control box cover. Locate the timer fill valve cam (Cam 4 from the timer motor). Locate the spanner wrench taped to the electrical panel. The spanner wrench is used to adjust the cam.

To increase the water level, open the notch of the adjustable cam. To decrease the water level, close the notch. Care must be taken that the set point does not extend into the home position of the timer. Do not move the side of the cam that starts the fill; this will change the sequence of cycle operation. With the door closed turn the power circuit breaker on. Open and close the door to run a cycle, then check the water level. Adjust as necessary then close the control box cover.

The machine runs a complete cycle to drain and fill. If the machine is not allowed to drain, the water will build up inside the tub. After the initial fill, the rinse water for the current cycle will become the wash water for the next cycle.

WARE PREPARATION: Proper preparation of ware will help ensure good results and less re-washes. If not done properly, ware may not come out clean and the efficiency of the dishmachine will be reduced. It is important to remember that a dishmachine is not a garbage disposal and that simply throwing unscraped dishes into the machine simply defeats the purpose altogether of washing the ware. Scraps should be removed from ware prior to being loaded into a rack. Pre-rinsing and pre-soaking are good ideas, especially for silverware and casserole dishes.

Place cups and glasses upside down in racks so that they do not hold water during the cycle. The dishmachine is meant not only to clean, but to sanitize as well, to destroy all of the bacteria that could be harmful to human beings. In order to do this, ware must be properly prepared prior to being placed in the machine.

DAILY MACHINE PREPARATION: Refer to the section entitled “PREPARATION” at the top of this page and follow the instructions there. Afterwards, check that all of the chemical levels are correct and/or that there is plenty of detergent available for the expected workload.

WARM-UP CYCLES: For a typical daily start-up, it is recommended to run the machine through 3 cycles to ensure that all of the cold water is out of the system and to verify that the unit is operating correctly. To cycle the machine, ensure that the power is on and that the tub has filled to the correct level. Lift the doors and the cycle light will illuminate. When the light goes out, close the doors, the unit will start, run through the cycle, and shut off automatically. Repeat this two more times. The unit should now be ready to proceed with the washing of ware.

OPERATION INSTRUCTIONS (CONTINUED)

WASHING A RACK OF WARE: To wash a rack, open the doors completely (being careful for hot water that may drip from the doors) and slide the rack into the unit. Close the doors and the
unit will start automatically. Once the cycle is completed, open the door (again watching for the dripping hot water) and remove the rack of clean ware. Replace with a rack of soiled ware and close the doors. The process will then repeat itself.

OPERATIONAL INSPECTION: Based upon usage, the pan strainer may become clogged with soil and debris as the workday progresses. Operators should regularly inspect the pan strainer to ensure it has not become clogged. If the strainer does, it will reduce the washing capability of the machine. Instruct operators to clean out the pan strainer at regular intervals or as required by work load.

SHUTDOWN AND CLEANING: At the end of the workday, close the doors. When the unit completes the cycle, turn the power switch to the OFF position and open the doors. Manually remove the drain stopper from the tub and allow the tub to drain (NOTE: the wash tank water will be hot so caution is advised). Once the wash tub is drained, remove the pan strainer and the pump suction strainer. Remove soil and debris from the strainer and set to the side. Unscrew the wash and rinse arms from their manifolds. Remove the endcaps and flush the arms with water. Use a brush to clean out the inside of the arms. If the nozzles appear to be clogged, use a toothpick to remove the obstruction. Wipe the inside of the unit out, removing all soil and scraps. Reassemble the wash and rinse arms and replace them in the unit. The arms only need to be hand tight, do not use tools to tighten them down. Reinstall the strainers and close the doors.

CAM TIMER OPERATION

The Conserver XL Series cam timer is a 1 minute, 30 second, 8-cam timer (cam 8 is a spare) that controls the operation of the dishmachine. The following is a description of the set points for each cam and the function of each switch.

CAM 1: Cam 1 is a cut cam with a single notch and serves as the cycle/reset control.

FUNCTION: When the machine is in the operation mode the notch is the home position. The machine will remain idle until the door is opened, then cam 1 moves to the start position and holds until the door is closed. The closing of the door will start the next cycle. The cam will rotate a complete cycle, and return to the home position and hold.

CAM 2: Cam 2 is a cut cam and provides the wash cycle timing.

FUNCTION: The wash cam works off the normally open contacts of Cam 2. This requires the microswitch be held closed by the cam. It will close and energize the wash pump 2 seconds after the cycle switch is activated. The pump will operate through the wash cycle (40 seconds) then shut down for the dwell period (20 seconds). As the cam rotates it energizes the pump for the rinse cycle (25 seconds). When cam 1 reaches it's home position it will de-energize cam 2, shutting down the wash pump.

NOTE: The last 6 cams are adjustable. The following instructions will require that the timer position have the cams to the front and the motor to the left.

CAM 3: Cam 3 is an adjustable cam and controls the drain valve.

FUNCTION: The drain solenoid works off the normally closed contacts of cam 3. When the cycle is initiated, the microswitch will be held open until it is allowed to drop into the notch of the cam. This energizes the drain solenoid which drains the machine. After a 12 second delay the cam reverses the microswitch, de-energizing the drain solenoid. This cam may require adjusting due to varying water pressure. The drain solenoid must remain open long enough to remove whatever water the fill valve solenoid allows in the machine. This could vary due to the water supply line pressure.

SETTINGS: The right side of cam 3 must be set to pick up the switch arm just before the wash/rinse cycle cam switch drops. It will hold the drain solenoid open to drain all the water in the tank from the unit during the dwell period. Any adjustment made to the drain should be made to the left side of cam 3. The cam must be moved back into the wash time until all of the water is drained from the machine.

CAM 4: Cam 4 is an adjustable cam and controls the fill valve and therefore the amount of water used.

FUNCTION: The fill valve cam works off the normally closed contacts of cam 4. This requires the switch to be held open by the cam and allowed to drop into the notch to operate the fill valve. This energizes the fill solenoid which opens to start filling the machine with fresh water. After a 10 second delay, the cam reverses the microswitch, de-energizing the fill solenoid. The fill cam may require adjustment due to varying water pressure. The fill solenoid must remain open a sufficient length of time to fill the machine to the correct level.

SETTINGS: The right side of cam 4 must be set to allow the switch arm to drop 2 seconds before the drain solenoid is de-energized which flushes the detergent residue from the unit. It will hold the fill solenoid open until the cam switch arm is raised. At that time the fill solenoid is de-energized, shutting off the incoming water. The tub will be filled to the correct level. Any adjustment made to the timing of the fill solenoid should be made with the left side of cam 4. To increase the water level, open the notch of the cam and for decreasing the level of the notch should be closed.

CAM 5: Cam 5 is an adjustable cam and controls the sanitizer pump.

FUNCTION: The sanitizer pump cam works off the normally closed contacts of cam 5. This requires the switch arm to be held open by the cam and allowed to drop into the notch to operate the pump. The time that the sanitizer pump will remain energized must be determined in the field to suit the chemical used and water conditions.

SETTINGS: The left side of cam 5 must be set to allow the switch arm to drop in past the starting point of the fill cam and after the drain solenoid has closed. The adjustment for sanitizer volume must be made with the right side of the cam. To increase the volume the notch should be increased or to decrease the amount of sanitizer the notch should be closed slightly in increments until the correct level is reached.

CAM TIMER OPERATION (CONTINUED)

CAM 6: Cam 6 is an adjustable can and controls the detergent pump.

FUNCTION: The detergent pump cam works off the normally closed contacts of cam 6. This requires the switch arm to be held open by the cam and allowed to drop into the notch to operate the pump. The time that the detergent pump will remain energized must be determined in the field to suit the chemical used and water conditions.

SETTINGS: The left side of cam 6 must be set to drop in past the starting point of the wash pump cam. The adjustment for detergent volume must be made with the right side of the cam. To increase the volume, the notch should be increased or to decrease the amount of detergent the notch should be closed slightly in increments until the correct level is reached.

CAM 7: Cam 7 is an adjustable cam and controls the rinse aid pump.

FUNCTION: The rinse aid pump cam works off the normally closed contacts of cam 7. This requires the switch arm to be held open by the cam and allowed to drop into the notch to operate the pump. The time that the rinse aid pump will remain energized must be determined in the field to suit the chemical used and water conditions.

SETTINGS: The left side of cam 7 must be set to drop in past the starting point of the fill cam and after the drain solenoid has closed. The adjustment for rinse aid volume must be made with the right side of the cam. To increase the volume the notch should be increased or to decrease the amount of detergent the notch should be closed slightly in increments until the correct level is reached.

2 SECONDS INTO CYCLE
*Wash pump starts, runs for 40 seconds, then shuts down. Controlled by C2 cam.

4 SECONDS INTO CYCLE
*Detergent feed pump is energized. The length of time will be field determined. Time will depend on the detergent used and water conditions. Controlled by C6 cam.

10 SECONDS INTO CYCLE
* Detergent feed pump shuts down. Controlled by C6 cam.

42 SECONDS INTO CYCLE
* Wash pump shuts down. Controlled by C2 cam.
* Drain solenoid is energized (opens). Wash water drains from the unit. Controlled by C3 cam.

51 SECONDS INTO CYCLE
* Fill solenoid valve is energized (opened) starting to fill unit. Controlled by C4 cam.

53 SECONDS INTO CYCLE
* Drain solenoid valve is de-energized (closed). Controlled by C3 cam.

54 SECONDS INTO CYCLE
* Sanitizer pump is energized, injecting sanitizer into wash tank. Controlled by C5 cam.
* Rinse aid pump is energized, injecting rinse aid into wash tank. Controlled by C7 cam.

58 SECONDS INTO CYCLE
* Sanitizer pump is de-energized. The length of time that the sanitizer pump is activated will be determined in the field. Timing will depend on the chemical used and water conditions. Controlled by C5 cam.

60 SECONDS INTO CYCLE
* Rinse aid pump is de-energized. The length of time that the rinse aid pump is activated will be determined in the field. Timing will depend on the chemical used and water conditions. Controlled by C7 cam.

62 SECONDS INTO CYCLE
* Wash pump is energized for the rinse cycle.
* Fill solenoid valve is de-energized.

87 SECONDS INTO CYCLE
* Wash pump is de-energized.
* End of cycle.

SECTION 3:
PREVENTATIVE MAINTENANCE

The dishmachines covered in this manual are designed to operate with a minimum of interaction with the operator. However, this does not mean that some items will not wear out in time. Jackson highly recommends that any maintenance and repairs not specifically discussed in this manual should be performed by QUALIFIED SERVICE PERSONNEL ONLY. Performing maintenance on your dishmachine may void your warranty if it is still in effect, so if you have a question or concern, do not hesitate to contact one of the QUALIFIED SERVICE AGENCIES listed in the back of this manual.

There are many things that operators can do to prevent catastrophic damage to the dishmachine. One of the major causes of component failure has to do with prescrapping procedures. A dishmachine is not a garbage disposal; any large pieces of material that are put into the machine shall remain in the machine until they are either broken up (after spreading out on your ware!) or physically removed. Strainers are installed to help catch debris, but they do no good of they are clogged. Have operators regularly inspect the pan strainers to ensure (1) that they are free of soil and debris and (2) they are laying flat in the tub.

When cleaning out strainers, do NOT beat them on waste cans. The strainers are made of metal and can be forgiving; but once severe damage is done, it is next to impossible for the strainer to work in the way it was designed to. Wipe out strainers with a rag and rinse under a faucet if necessary. For stubborn debris, a toothpick should be able to dislodge any obstructions from the perforations. Always ensure that strainers are placed back in the machine before operation and that they lay flat in the tub.

You may wish to learn more about how your water hardness will effect the performance of your machine. Hard water makes dishmachines work harder and decreases efficiency.

Again, it is important to remind operators that trying to perform corrective maintenance on the dishmachine could lead to larger problems or even cause harm to the operator. If a problem is discovered; secure the dishmachine using proper shut down procedures as listed in this manual and contact a QUALIFIED SERVICE AGENCY.

Some problems, however, may having nothing to do with the machine itself and no amount of preventative maintanence is going to help. A common problem has to do with temperatures being too low. Verify that the water temperatures coming to your dishmachine match the requirements listed on the machine data plate. There can be a variety of reasons why your water temperature could be too low and you should discuss it with a QUALIFIED SERVICE AGENCY to determine what can be done.

By following the operating and cleaning instructions in this manual, you should get the most efficient results from your machine. As a reminder, here are some steps to take to ensure that you are using the dishmachine the way it was designed to work:

1. Ensure that the water temperatures match those listed on the machine data plate.
2. Ensure that all strainers are in place before operating the machine.
3. Ensure that all wash and/or rinse arms are secure in the machine before operating.
4. Ensure that drains are closed/sealed before operating.
5. Remove as much soil from dishes by hand as possible before loading into racks.
6. Do not overfill racks.
7. Ensure that glasses are placed upside down in the rack.
8. Ensure that all chemicals being injected to machine have been verified as being at the correct concentrations.
9. Clean out the machine at the end of every workday as per the instructions in the manual.
10. Always contact a QUALIFIED SERVICE AGENCY whenever a serious problem arises.
11. Follow all safety procedures, whether listed in this manual or put forth by local, state or national codes/regulations.

SECTION 4:
TROUBLESHOOTING SECTION

COMMON PROBLEMS (DOMESTIC UNITS)

WARNING: Inspection, testing and repair of electrical equipment should be performed only by qualified service personnel. Certain procedures in this section require electrical tests or measurements while power is applied to the machine. **Exercise extreme caution at all times.** If test points are not easily accessible, disconnect power, attach test equipment and reapply power to test. When replacing electrical parts, disconnect power at source circuit breaker.

Problem: Dishmachine will not run, no voltage at wash relay terminals L1 and T1.

1. Service disconnect switch off or faulty. Turn disconnect on.
2. Branch circuit breaker tripped/fuse blown. Reset or replace.
3. Loose or broken connection to dishmachine. Tighten or replace connections.

Problem: Machine will not run in "ON" position unless cam timer is moved off the "home" position.

1. Door switch shorted out. With the door open, check for voltage between ORANGE/WHITE door switch and neutral. If 120V, replace the door switch.
2. Faulty control relay. With the door open, check for voltage between connections #9 & #3 on control relay. If 120V, replace control relay.
3. Faulty "cycle reset" microswitch in cam timer. Replace microswitch.

Problem: Machine will not cycle in "ON" position, works in Delime mode.

1. Faulty cycle reset cam microswitch. With the switch in the Normal position, rotate the cams manually off the home position. Check the voltage between the ORANGE and BLACK/WHITE wires on the cycle reset switch. If it is 120V, then the switch is open and should be replaced.
2. Faulty cam timer motor. If cam timer is not rotating, check the voltage to the motor. If voltage is present when the door is closed, replace the motor.
3. Faulty control relay. Check the voltage across contacts #9 and #6. If 120V when the door is closed, replace the relay.
4. Faulty NORMAL/DELIME switch. In the NORMAL position, check the voltage between WHITE/BLACK & WHITE/RED wires to switch. If 120V, replace the switch.

Problem: Machine will not run. Wash pump motor will run if wash relay is depressed manually (nothing else works).

1. Open door switch. With door closed, measure voltage between BLUE and WHITE/BLACK wires on terminals #6 & #9 of the relay. If 120V, replace the relay.
2. Faulty control relay. Measure between the BLACK wires on terminals #6 & #9 of the relay. If 120V, replace the relay. Measure between the WHITE/ BLACK wire on terminal 4 and the ORANGE/WHITE wire on terminal 7 of the relay. If 120V, replace relay.

Problem: Machine will not run in "ON" position or in Delime mode.

1. Faulty door switch. With door closed, check for voltage between WHITE/BLACK and ORANGE/WHITE wires to the door switch. If 120V, replace open switch.
2. Faulty OFF/ON/FILL switch. With switch ON, check voltage between BLACK and WHITE/BLACK wires on switch. Replace the switch if 120V.
3. Faulty NORMAL/DELIME switch. In the NORMAL position, check the voltage between WHITE/BLACK & WHITE/RED wires to switch. If 120V, replace the switch.

Problem: Machine cycles continuously.
1. Cycle reset switch loose. Reposition switch assembly, bend metal lever if necessary.
2. Faulty cycle reset switch.Measure between BLACK/YELLOW & ORANGE wires on "cycle reset" switch while timer is rotating. As the switch lever drops into home position you should measure 120V. If not, adjust or replace the switch.

Problem: Machine fills continuously even with no power applied to machine.

1. Solenoid valve dirty or faulty. Clean valve, replace plunger and/or diaphragm.

COMMON PROBLEMS (DOMESTIC UNITS)

Problem: Machine will not fill, other functions work.
1. Y-strainer plugged. Clean strainer.
2. Water valve(s) turned off. Turn on water valves.
3. Faulty solenoid valve diaphragm. Replace diaphragm, clean foreign material out of valve body and orifices.
4. Faulty solenoid coil. If coil has voltage but no continuity, replace coil (continuity is measured across coil connectors with wires removed).
5. Faulty fill microswitch. Will not fill during cycle only. During fill, measure between the ORANGE and WHITE/GREEN wires. If 120V, adjust or replace switch).
6. Faulty OFF/ON/FILL switch. Depress switch, measure between BLACK and WHITE/GREEN wire. If 120V, replace switch.

Problem: Machine fills continuously, only when the power is on.

1. Faulty fill microswitch. Repair/replace switch.
2. Cam timer stalled in fill position. If cam timer is not rotating, check the voltage to the timer motor. If 120V when door is closed, replace the timer motor.
3. Shorted OFF/ON/FILL switch. Check voltage between BLACK and WHITE/GREEN connections of the switch in the "ON" position. If you do not read 120V, replace switch.

Problem: Wash motor does not run, other functions work, motor runs only when the wash relay is manually pushed down.

1. Loose wire connection to microswitch, relay, or contactor. Tighten wires.
2. Faulty wash cam microswitch. During wash cycle, check voltage between ORANGE and BLACK/ ORANGE wires on the microswitch. If 120V, replace the switch.
3. Faulty delime switch. During wash cycle, check the voltage between the two BLACK/ORANGE wires (not jumpers). If 120V, replace the delime switch.

Problem: Wash motor does not run, other functions work, motor runs only when the wash relay is manually pushed down.
1. Faulty control relay. Check the voltage across relay contacts #7 & #4. If 120V during the wash cycle, replace the relay.
2. Faulty wash relay. Check voltage at relay coil between ORANGE/BLACK and WHITE wires. If you read 120V, coil is faulty. Replace the relay.

Problem: Wash motor does not run even when the wash relay is manually depressed; other functions work.
1. Loose wire connections to motor, delime switch, or from contactors. Tighten wires.
2. Mechanical binding in pump. If motor has correct incoming voltage, and its overload is tripping, repair or replace the pump.
3. Mechanical binding in pump. On end of motor, opposite pump, remove endcap. With large slot type screwdriver, fit into slot in end of shaft. Turn to dislodge. Run motor as normal. If it still does not run, replace motor.
4. Faulty wash motor. If the motor has the correct incoming voltage and the pump is okay, replace the motor.
5. Faulty wash relay. With the wash relay pushed in, check the voltage between T1 and L1 of the relay. If 120V, replace the relays.
6. High or low voltage problem. Check voltage at motor and at power terminal block. Compare to electrical specifications.

Problem: Wash motor runs continuously.

1. The NORMAL/DELIME switch is in the Delime position. Place the switch in the Normal position.
2. Wash relay contacts are welded closed. Turn machine off. If wash relay doesn't release, replace contactor.
3. Cam timer stalled in wash or rinse cycle. If cam timer is not rotating, check the voltage to the timer motor. If no voltage when the door is closed, check wires and/or replace motor.
4. Wash motor microswitch faulty. Tighten connections, make sure switch makes contact, replace if necessary.

Problem: Machine will not hold water.

1. Faulty drain ball. Replace drain ball.
2. Obstructed drain hole. Clear obstruction.
3. Drain linkage is binding. Repair drain mechanism parts.

Problem: Machine runs with door open.

1. Door switch shorted. With machine off, open doors, and with both wires to door switch unplugged, measure continuity between wires on switch. If there is continuity, replace the switch.
2. Faulty wash relay (wash relay contacts welded closed). Turn machine off, if wash relay doesn't release, replace contactor.
3. Faulty control relay. With power off, remove WHITE/RED & BLACK/YELLOW wires from control relay terminals #9 & #6. If there is continuity, replace relay.

Problem: Low pumped water pressure.

1. Water level is too low. Increase fill time on cam timer, or decrease drain timer, or increase incoming water pressure.
2. Sump strainer clogged. Clean strainer.
3. Wash arms clogged. Clean arms and jets.
4. Obstruction in pump housing or wash manifold. Disassemble and clear.
5. Pump impeller worn or broken. Replace the pump impeller.

Problem: Sanitizer pump doesn't run during the cycle or through the use of the prime switch.

1. Loose motor terminal wire. Tighten connections.
2. Faulty sanitizer pump motor. If you read 120V at the sanitizer motor terminals during the sanitizer feed cycle, replace the motor.

Problem: Machine keeps tripping the service breaker.

1. Power supply shorted to ground. Check for loose wires or burned connections.
2. Faulty door switch or detergent safety switch. Check for loose or wet connections at switch and at wire connectors. Bypass switch to verify that switch is problem; replace if required.
3. Pump impeller jammed. Clear impeller.
4. Wash pump motor faulty. Check motor voltage and amp load. If amp load is over 12 amps, replace the motor.
5. Circuit breaker is too small. Replace with properly sized breaker. Refer to the data plate.

Problem: Machine will not drain.

1. Loose wire connection. Tighten wires to timer drain microswitch.
2. Drain hole/strainer obstructed. Clear obstructions.
3. Not enough time to drain. Adjust fill cam on timer and/or the drain cam.
4. Drain linkage binding. Repair drain parts.
5. Faulty drain microswitch on timer. With power off and the drain cam on the timer in the home position, remove the WHITE/YELLOW wire from the microswitch.
6. Faulty drain microswitch on timer. Measure the continuity between the ORANGE wire on the microswitch and the tab that the WHITE/ YELLOW wire is attached onto. If there is no continuity, replace the microswitch.
7. Drain solenoid defective. Check for voltage at solenoid valve during the drain cycle. Replace if voltage is present.

Problem: Sanitizer pump runs continuously.

1. Shorted sanitizer microswitch on cam timer. If there is not 120V between the ORANGE and GREY wires on the sanitization pump motor microswitch when switch is out of the home position, replace the switch.
2. Shorted prime switch. If there is not 120 volts between GREY and WHITE/RED wires to prime switch, replace the switch. Sanitizer pump does not run during the cycle, but runs when primed.
3. Loose or broken wire. Tighten connections to microswitch.
4. Faulty sanitizer microswitch on cam timer. When sanitizer cam is in home position, measure voltage between ORANGE and GREY wires on the microswitch. If 120V, replace switch.

COMMON PROBLEMS (DOMESTIC UNITS)

Problem: Prime switch does not activate sanitizer pump.

1. Faulty prime switch. With the prime switch in the prime position, check for voltage between the GREY and WHITE/RED wires to switch. If 120V, replace the switch.
2. Faulty delime switch. With the delime switch in the DELIME position, check for voltage between the WHITE/BLACK and WHITE/RED wires to the delime switch. If 120V, replace the delime switch.

Problem: Detergent not feeding; rinse aid feeds okay.

1. Misadjusted cam. Adjust detergent cam on cam timer.
2. Faulty detergent microswitch on cam timer. When the detergent cam is in the home position, measure voltage between ORANGE and GREY/ WHITE wires. If 120V, replace the microswitch.

Problem: Rinse aid not feeding, detergent feeds okay.

1. Misadjusted cam. Adjust rinse aid cam on cam timer.
2. Faulty rinse aid microswitch on cam timer. When the rinse aid cam is in the home position, measure the voltage between the ORANGE and ORANGE/YELLOW wires. If 120V, replace the microswitch.

Problem: Sanitizer pump does not run during the cycle, but runs when primed.

1. Loose or broken wire. Tighten connections to microswitch.
2. Faulty sanitizer microswitch on cam timer. When sanitizer cam is in home position, measure voltage between ORANGE and GREY wires on the microswitch. If 120V, replace switch.

COMMON PROBLEMS (EXPORT UNITS)

WARNING: Inspection, testing and repair of electrical equipment should be performed only by qualified service personnel. Certain procedures in this section require electrical tests or measurements while power is applied to the machine. **Exercise extreme caution at all times.** If test points are not easily accessible, disconnect power, attach test equipment and reapply power to test. When replacing electrical parts, disconnect power at source circuit breaker.

Problem: Dishmachine will not run, no voltage at wash relay terminals L1 and T1.

1. Service disconnect switch off or faulty. Turn disconnect on.
2. Branch circuit breaker tripped/fuse blown. Reset or replace.
3. Loose or broken connection to dishmachine. Tighten or replace connections.

Problem: Machine will not run in "ON" position unless cam timer is moved off the "home" position.

1. Door switch shorted out. With the door open, check for voltage between ORANGE/WHITE door switch and neutral. If 220V, replace the door switch.
2. Faulty control relay. With the door open, check for voltage between connections #9 & #3 on control relay. If 220V, replace control relay.
3. Faulty "cycle reset" microswitch in cam timer. Replace microswitch.

Problem: Machine will not cycle in "ON" position, works in Delime mode.

1. Faulty cycle reset cam microswitch. With the switch in the Normal position, rotate the cams manually off the home position. Check the voltage between the ORANGE and BLACK/WHITE wires on the cycle reset switch. If it is 220V, then the switch is open and should be replaced.
2. Faulty cam timer motor. If cam timer is not rotating, check the voltage to the motor. If voltage is present when the door is closed, replace the motor.
3. Faulty control relay. Check the voltage across contacts #9 and #6. If 220V when the door is closed, replace the relay.
4. Faulty NORMAL/DELIME switch. In the NORMAL position, check the voltage between WHITE/BLACK & WHITE/RED wires to switch. If 220V, replace the switch.

Problem: Machine will not run. Wash pump motor will run if wash relay is depressed manually (nothing else works).

1. Open door switch. With door closed, measure voltage between BLUE and WHITE/BLACK wires on terminals #6 & #9 of the relay. If 120V, replace the relay.
2. Faulty control relay. Measure between the BLACK wires on terminals #6 & #9 of the relay. If 220V, replace the relay. Measure between the WHITE/ BLACK wire on terminal 4 and the ORANGE/WHITE wire on terminal 7 of the relay. If 220V, replace relay.

Problem: Machine will not run in "ON" position or in Delime mode.

1. Faulty door switch. With door closed, check for voltage between WHITE/BLACK and ORANGE/WHITE wires to the door switch. If 220V, replace open switch.
2. Faulty OFF/ON/FILL switch. With switch ON, check voltage between BLACK and WHITE/BLACK wires on switch. Replace the switch if 220V.
3. Faulty NORMAL/DELIME switch. In the NORMAL position, check the voltage between WHITE/BLACK & WHITE/RED wires to switch. If 220V, replace the switch.

Problem: Machine cycles continuously.
1. Cycle reset switch loose. Reposition switch assembly, bend metal lever if necessary.
2. Faulty cycle reset switch.Measure between BLACK/YELLOW & ORANGE wires on "cycle reset" switch while timer is rotating. As the switch lever drops into home position you should measure 220V. If not, adjust or replace the switch.

Problem: Machine fills continuously even with no power applied to machine.

1. Solenoid valve dirty or faulty. Clean valve, replace plunger and/or diaphragm.

COMMON PROBLEMS (EXPORT UNITS)

Problem: Machine will not fill, other functions work.

1. Y-strainer plugged. Clean strainer.
2. Water valve(s) turned off. Turn on water valves.
3. Faulty solenoid valve diaphragm. Replace diaphragm, clean foreign material out of valve body and orifices.
4. Faulty solenoid coil. If coil has voltage but no continuity, replace coil (continuity is measured across coil connectors with wires removed).
5. Faulty fill microswitch. Will not fill during cycle only. During fill, measure between the ORANGE and WHITE/GREEN wires. If 220V, adjust or replace switch).
6. Faulty OFF/ON/FILL switch. Depress switch, measure between BLACK and WHITE/GREEN wire. If 220V, replace switch.

Problem: Machine fills continuously, only when the power is on.

1. Faulty fill microswitch. Repair/replace switch.
2. Cam timer stalled in fill position. If cam timer is not rotating, check the voltage to the timer motor. If 220V when door is closed, replace the timer motor.
3. Shorted OFF/ON/FILL switch. Check voltage between BLACK and WHITE/GREEN connections of the switch in the "ON" position. If you do not read 220V, replace switch.

Problem: Wash motor does not run, other functions work, motor runs only when the wash relay is manually pushed down.

1. Loose wire connection to microswitch, relay, or contactor. Tighten wires.
2. Faulty wash cam microswitch. During wash cycle, check voltage between ORANGE and BLACK/ORANGE wires on the microswitch. If 220V, replace the switch.
3. Faulty delime switch. During wash cycle, check the voltage between the two BLACK/ ORANGE wires (not jumpers). If 220V, replace the delime switch.

Problem: Wash motor does not run, other functions work, motor runs only when the wash relay is manually pushed down.

1. Faulty control relay. Check the voltage across relay contacts #7 & #4. If 220V during the wash cycle, replace the relay.
2. Faulty wash relay. Check voltage at relay coil between ORANGE/BLACK and WHITE wires. If you read 220V, coil is faulty. Replace the relay.

Problem: Wash motor does not run even when the wash relay is manually depressed; other functions work.

1. Loose wire connections to motor, delime switch, or from contactors. Tighten wires.
2. Mechanical binding in pump. If motor has correct incoming voltage, and its overload is tripping, repair or replace the pump.
3. Mechanical binding in pump. On end of motor, opposite pump, remove endcap. With large slot type screwdriver, fit into slot in end of shaft. Turn to dislodge. Run motor as normal. If it still does not run, replace motor.
4. Faulty wash motor. If the motor has the correct incoming voltage and the pump is okay, replace the motor.
5. Faulty wash relay. With the wash relay pushed in, check the voltage between T1 and L1 of the relay. If 220V, replace the relays.
6. High or low voltage problem. Check voltage at motor and at power terminal block. Compare to electrical specifications.

Problem: Wash motor runs continuously.

1. The NORMAL/DELIME switch is in the Delime position. Place the switch in the Normal position.
2. Wash relay contacts are welded closed. Turn machine off. If wash relay doesn't release, replace contactor.
3. Cam timer stalled in wash or rinse cycle. If cam timer is not rotating, check the voltage to the timer motor. If no voltage when the door is closed, check wires and/or replace motor.
4. Wash motor microswitch faulty. Tighten connections, make sure switch makes contact, replace if necessary.

Problem: Sanitizer pump doesn't run during the cycle or through the use of the prime switch.

1. Loose motor terminal wire. Tighten connections.
2. Faulty sanitizer pump motor. If you read 220V at the sanitizer motor terminals during the sanitizer feed cycle, replace the motor.

COMMON PROBLEMS (EXPORT UNITS)

Problem: Machine runs with door open.

1. Door switch shorted. With machine off, open doors, and with both wires to door switch unplugged, measure continuity between wires on switch. If there is continuity, replace the switch.
2. Faulty wash relay (wash relay contacts welded closed). Turn machine off, if wash relay doesn't release, replace contactor.
3. Faulty control relay. With power off, remove WHITE/RED & BLACK/YELLOW wires from control relay terminals #9 & #6. If there is continuity, replace relay.

Problem: Low pumped water pressure.

1. Water level is too low. Increase fill time on cam timer, or decrease drain timer, or increase incoming water pressure.
2. Sump strainer clogged. Clean strainer.
3. Wash arms clogged. Clean arms and jets.
4. Obstruction in pump housing or wash manifold. Disassemble and clear.
5. Pump impeller worn or broken. Replace the pump impeller.

Problem: Machine keeps tripping the service breaker.

1. Power supply shorted to ground. Check for loose wires or burned connections.
2. Faulty door switch or detergent safety switch. Check for loose or wet connections at switch and at wire connectors. Bypass switch to verify that switch is problem; replace if required.
3. Pump impeller jammed. Clear impeller.
4. Wash pump motor faulty. Check motor voltage and amp load. If amp load is over 12 amps, replace the motor.
5. Circuit breaker is too small. Replace with properly sized breaker. Refer to the data plate.

Problem: Machine will not drain.

1. Loose wire connection. Tighten wires to timer drain microswitch.
2. Drain hole/strainer obstructed. Clear obstructions.
3. Not enough time to drain. Adjust fill cam on timer and/or the drain cam.
4. Drain linkage binding. Repair drain parts.
5. Faulty drain microswitch on timer. With power off and the drain cam on the timer in the home position, remove the WHITE/YELLOW wire from the microswitch.
6. Faulty drain microswitch on timer. Measure the continuity between the ORANGE wire on the microswitch and the tab that the WHITE/ YELLOW wire is attached onto. If there is no continuity, replace the microswitch.
7. Drain solenoid defective. Check for voltage at solenoid valve during the drain cycle. Replace if voltage is present.

Problem: Machine will not hold water.

1. Faulty drain ball. Replace drain ball.
2. Obstructed drain hole. Clear obstruction.
3. Drain linkage is binding. Repair drain mechanism parts.

Problem: Sanitizer pump runs continuously.

1. Shorted sanitizer microswitch on cam timer. If there is not 120V between the ORANGE and GREY wires on the sanitization pump motor microswitch when switch is out of the home position, replace the switch.
2. Shorted prime switch. If there is not 220 volts between GREY and WHITE/RED wires to prime switch, replace the switch. Sanitizer pump does not run during the cycle, but runs when primed.
3. Loose or broken wire. Tighten connections to microswitch.
4. Faulty sanitizer microswitch on cam timer. When sanitizer cam is in home position, measure voltage between ORANGE and GREY wires on the microswitch. If 220V, replace switch.

COMMON PROBLEMS (EXPORT UNITS)

Problem: Prime switch does not activate sanitizer pump.

1. Faulty prime switch. With the prime switch in the prime position, check for voltage between the GREY and WHITE/RED wires to switch. If 220V, replace the switch.
2. Faulty delime switch. With the delime switch in the DELIME position, check for voltage between the WHITE/BLACK and WHITE/RED wires to the delime switch. If 220V, replace the delime switch.

Problem: Detergent not feeding; rinse aid feeds okay.

1. Misadjusted cam. Adjust detergent cam on cam timer.
2. Faulty detergent microswitch on cam timer. When the detergent cam is in the home position, measure voltage between ORANGE and GREY/ WHITE wires. If 220V, replace the microswitch.

Problem: Rinse aid not feeding, detergent feeds okay.

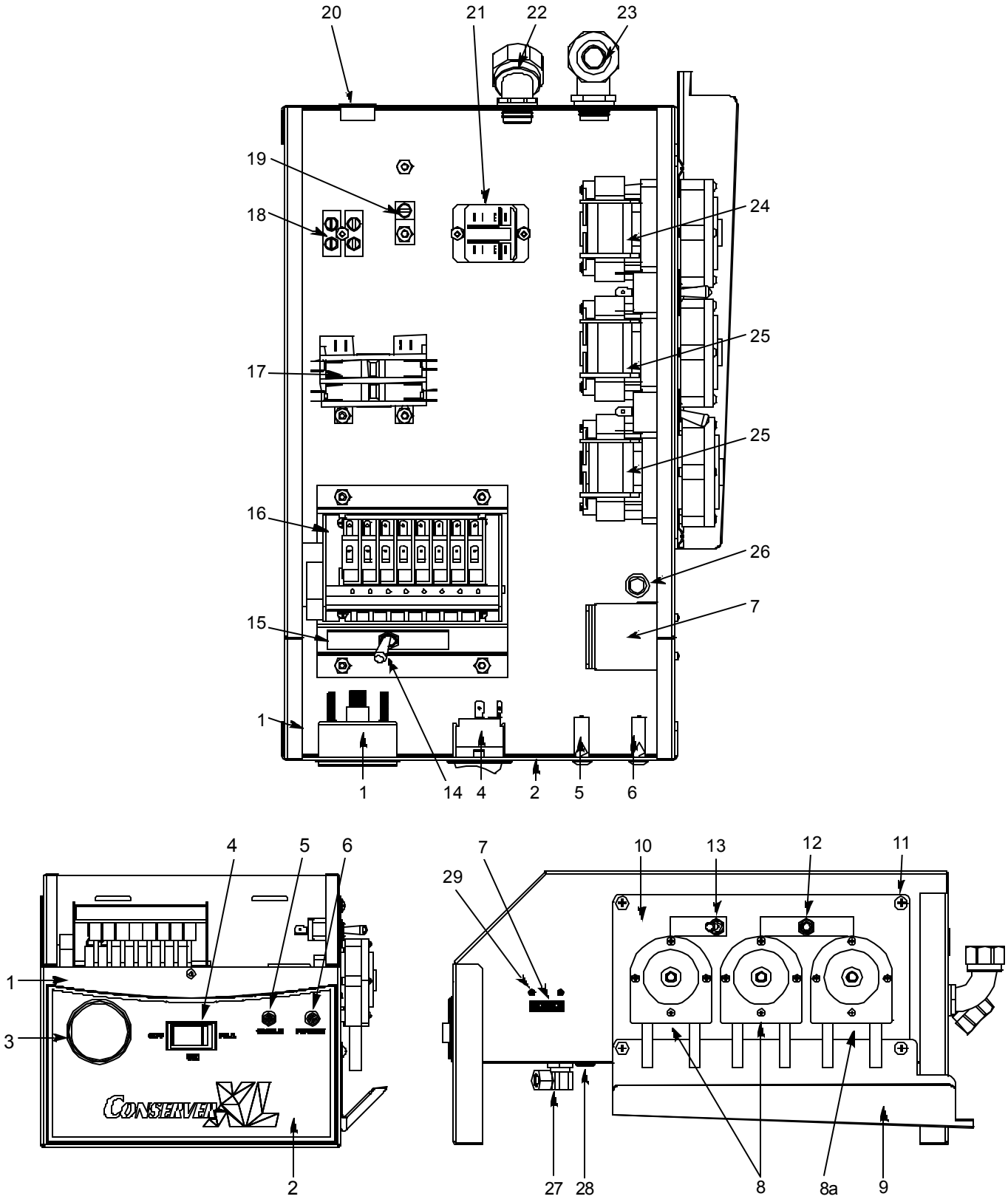
1. Misadjusted cam. Adjust rinse aid cam on cam timer.
2. Faulty rinse aid microswitch on cam timer. When the rinse aid cam is in the home position, measure the voltage between the ORANGE and ORANGE/YELLOW wires. If 220V, replace the microswitch.

Problem: Sanitizer pump does not run during the cycle, but runs when primed.

1. Loose or broken wire. Tighten connections to microswitch.
2. Faulty sanitizer microswitch on cam timer. When sanitizer cam is in home position, measure voltage between ORANGE and GREY wires on the microswitch. If 220V, replace switch.

SECTION 5:
PARTS SECTION

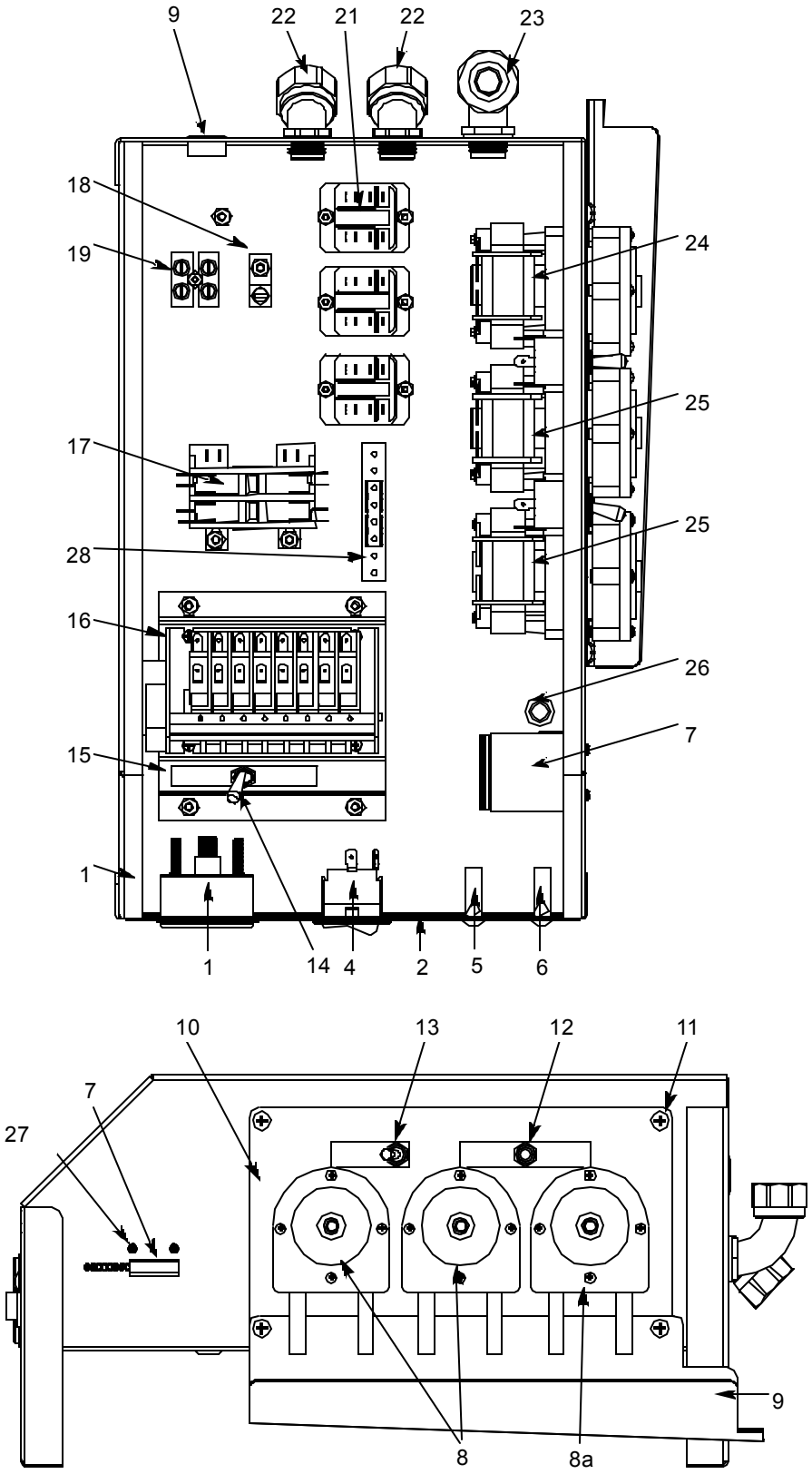
CONSERVER XL CONTROL BOX ASSEMBLY



CONSERVER XL CONTROL BOX ASSEMBLY (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Control Box Weldment	5700-002-04-57
2	1	Decal, Control Box Front	9905-002-04-61
3	1	Thermometer	6685-111-68-49
4	1	Switch, On/Off, DPST	5930-111-38-79
5	1	Cycle Light	5945-504-08-18
6	1	Power Light	5945-504-07-18
7	1	Cycle Counter, 115 Volt	5990-111-35-38
7	1	Cycle Counter, 240 Volt	5990-111-47-42
8	2	Chemical Feeder Pump Kit Assembly	5700-001-37-10
8a	1	Chemical Feeder Pump Kit Assembly	5700-002-83-90
9	1	Drip Shield	5700-001-82-56
10	1	Peri-Pump Mounting Plate	5700-021-82-55
11	4	Screw, 10-32 x 3/8" Long	5305-173-12-00
12	1	Switch, Detergent/Rinse Aid Toggle	5930-011-35-27
		Decal, Det/Rinse Prime	9905-011-34-95
13	1	Switch, On/Off, SPST	5930-111-38-21
		Decal, Sanitizer Prime	9905-011-34-98
14	1	Switch, Delime	5930-301-21-18
		Decal, Delime/Normal	9905-011-34-96
15	1	Timer Mounting Bracket	5700-021-82-26
16	1	8 Cam Timer, 115 Volt	5945-111-35-32
16	1	8 Cam Timer, 240 Volt	5945-111-47-48
		Decal, Timer Cam Operation	9905-011-37-21
17	1	Contactor, 115 Volt	5945-109-05-69
17	1	Contactor, 240 Volt	5945-002-74-20
18	1	Terminal Block	5940-500-09-61
	1	Terminal Block Spacer	5700-011-40-05
19	1	Ground Wire Lug	5940-200-76-00
19	1	Ground Wire Lug	5940-200-12-44
20	1	Grommet, Split 7/8"	5975-200-40-00
21	1	Control Relay, 115 Volt	5945-111-35-19
21	1	Control Relay, 240 Volt	5945-111-47-51
22	1	Conduit Fitting, 1/2" 45° Plastic	5975-011-45-23
23	1	Conduit Fitting, 1/2" Straight Plastic	5975-011-45-13
24	1	Motor, Chemical Feeder Pump, 14 RPM, 115 V	4320-111-35-13
24	1	Motor, Chemical Feeder Pump, 14 RPM, 240 V	4320-111-47-46
25	2	Motor, Chemical Feeder Pump, 36 RPM, 115 V	4320-111-35-14
25	2	Motor, Chemical Feeder Pump, 36 RPM, 240 V	4320-111-47-47
26	1	Grommet	5325-011-46-73
27	1	Fitting, Brass	4730-206-23-00
28	2	Nut, Lock	5700-000-66-01
29	4	Screw, 4-40 x 1/4" Long	5305-002-32-38
Other items not shown:			
		Cover, Control Box	5700-002-04-62
		Cotter Pin, 3/32 x 3/4"	5315-207-01-00
		Decal, Power Connections	9905-011-47-64
		Decal, Copper Conductors	9905-011-47-35
		Decal, Warning-Disconnect Power	9905-100-75-93
		Hose, Drip Through Drain	5700-011-35-04
		Locknut, 6-32 Hex with Nylon Insert	5310-373-03-00
		Locknut, 10-24 Hex with Nylon Insert	5310-373-01-00
		Plug, 3/4" Metal	5975-212-02-02
		Stiffener, 17 3/8"	5700-002-66-49
		Tubing, 1/4" x 80" White	5700-011-37-12
		Tubing, 1/4" x 80" Red	5700-011-37-14
		Tubing, 1/4" x 80" Blue	5700-011-37-16

CONSERVER XL2 SERIES CONTROL BOX ASSEMBLY



CONSERVER XL2 SERIES CONTROL BOX ASSEMBLY (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Control Box Weldment	5700-002-21-56
2	1	Decal, Control Box Front	9905-002-20-46
3	1	Thermometer	6685-111-68-49
4	1	Power Switch	5930-111-38-79
5	1	Cycle Light	5945-504-08-18
6	1	Power Light	5945-504-07-18
7	1	Cycle Counter	5990-111-35-38
8	2	Chemical Feeder Pump Kit Assembly	5700-001-37-10
8a	1	Chemical Feeder Pump Kit Assembly	5700-002-83-90
9	1	Drip Shield	5700-031-82-56
10	1	Peri-Pump Mounting Plate	5700-021-33-70
11	4	Screw, 10-32 x 3/8" Long	5305-173-12-00
12	1	Switch, Detergent/Rinse Aid Toggle	5930-011-35-27
		Decal, DET/RINSE Prime	9905-011-34-95
13	1	Switch, On/Off, SPST	5930-111-38-21
		Decal, Sanitizer Prime	9905-011-34-98
14	1	Switch, Delime	5930-301-21-18
15	1	Timer Mounting Bracket	5700-021-82-26
	1	Decal, Cam Timer	9905-011-37-21
16	1	8 Cam Timer	5945-111-35-32
	1	Decal, Delime/Normal	9905-011-34-96
17	1	Contactor	5945-109-05-69
18	1	Ground Wire Lug	5940-200-76-00
19	1	Terminal Block	5940-500-09-61
	1	Spacer, Terminal Block	5700-011-40-05
20	1	Hole Plug, 1/2"	4730-011-60-22
21	3	Control Relay	5945-111-35-19
22	2	Conduit Fitting, 1/2" x 45°	5975-011-45-23
23	1	Conduit Fitting, 1/2" x 90°	5975-011-45-14
24	1	Motor, Chemical Feeder Pump, 14 RPM, 115 V	4320-111-35-13
24	1	Motor, Chemical Feeder Pump, 14 RPM, 240 V	4320-111-47-46
25	2	Motor, Chemical Feeder Pump, 36 RPM, 115 V	4320-111-35-14
25	2	Motor, Chemical Feeder Pump, 36 RPM, 240 V	4320-111-47-47
26	1	Grommet	5325-011-46-73
27	4	Screw, 4-40 x 1/4" Long	5305-002-32-38
28	1	Terminal Board	5940-021-94-85
Other parts not shown:			
Decal, Warning-Disconnect Power			9905-100-75-93
		Cover, Control Box	5700-002-04-62
		Switch, Reed	5930-111-41-70
		Switch Box, Side Weldment	5700-002-47-20
		Switch Box, Front Weldment	5700-002-21-53
		Grommet, 1/2" OD x 3/8" ID	5325-011-46-73
		Switch, 20 AMP	5930-011-48-21
		Plate, Switch Legend	5945-011-35-07
		Hose, Drip Through Drain	5700-011-35-04
		Tubing, 1/4" x 108" White	5700-000-96-78
		Tubing, 1/4" x 120" White	5700-011-37-13
		Tubing, 1/4" x 108" Red	5700-000-96-80
		Tubing, 1/4" x 120" Red	5700-011-37-15
		Tubing, 1/4" x 108" Blue	5700-000-96-79
		Tubing, 1/4" x 120" Blue	5700-011-37-17
		Tube, Tygon Sight	5700-111-34-91
		Stiffener, Chemical Tube	5700-002-66-49
		Decal, Power Connections	9905-011-47-64
		Decal, Copper Conductors	9905-011-47-35

ORDERING REPLACEMENT WIRE

Jackson dishmachines have several color and gauges of wire used in them and it may become necessary to replace these wires. Wire may be ordered from Jackson MSC Inc., but please note that it is only available in feet. Ensure that you order the correct color and gauge.

BLACK WIRE:

6 Gauge	6145-002-15-91
8 Gauge	6145-104-43-00
10 Gauge	6145-104-16-00
12 Gauge	6145-112-01-00
14 Gauge	6145-104-09-00
18 Gauge	6145-104-01-97
18 Gauge with Orange Stripes	6145-011-35-66
18 Gauge with White Stripes	6145-011-35-65
18 Gauge with Yellow Stripes	6145-011-35-64

BLUE WIRE:

6 Gauge	6145-002-15-93
8 Gauge	6145-104-44-00
10 Gauge	6145-104-42-00
14 Gauge	6145-104-04-00
18 Gauge	6145-104-35-00
18 Gauge with Black Stripes	6145-011-46-35
18 Gauge with Red Stripes	6145-011-46-37
18 Gauge with White Stripes	6145-011-46-36
18 Gauge with Yellow Stripes	6145-011-46-38
20 Gauge	6145-104-06-97
20 Gauge with Black Stripes	6145-104-17-97
20 Gauge with White Stripes	6145-104-13-97

GREEN WIRE:

8 Gauge	6145-002-15-94
14 Gauge	6145-104-03-00
18 Gauge	6145-104-32-00
18 Gauge with Yellow Stripes	6145-001-44-96
20 Gauge	6145-104-05-97
20 Gauge with Black Stripes	6145-011-59-57
20 Gauge with Yellow Stripes	6145-104-11-97

GREY WIRE:

18 Gauge	6145-104-36-00
18 Gauge with Black Stripes	6145-011-81-71
18 Gauge with Blue Stripes	6145-011-81-72
18 Gauge with Red Stripes	6145-011-46-41
18 Gauge with White Stripes	6145-011-35-60
18 Gauge with Yellow Stripes	6145-011-46-42
20 Gauge	6145-104-03-97

RED WIRE:

6 Gauge	6145-002-15-92
8 Gauge	6145-104-45-00
10 Gauge	6145-104-08-00
14 Gauge	6145-104-05-00
18 Gauge	6145-104-37-00
18 Gauge with Black Stripes	6145-011-59-56
18 Gauge with Blue Stripes	6145-011-81-74
18 Gauge with White Stripes	6145-011-81-73
18 Gauge with Yellow Stripes	6145-011-81-75
20 Gauge	6145-104-02-97

WHITE WIRE:

10 Gauge	6145-104-19-00
14 Gauge	6145-104-10-00
18 Gauge	6145-104-39-00
18 Gauge with Black Stripes	6145-011-35-70
18 Gauge with Blue Stripes	6145-011-46-40
18 Gauge with Green Stripes	6145-011-35-69
18 Gauge with Grey Stripes	6145-002-20-18
18 Gauge with Red Stripes	6145-011-35-67
18 Gauge with Yellow Stripes	6145-011-35-68
20 Gauge	6145-104-04-97
20 Gauge with Orange & Yellow Stripes	6145-104-16-97
20 Gauge with Yellow Stripes	6145-104-15-97

YELLOW WIRE:

18 Gauge	6145-104-33-00
18 Gauge with Black Stripes	6145-011-81-68
18 Gauge with Blue Stripes	6145-011-81-70
18 Gauge with Red Stripes	6145-011-81-69
20 Gauge	6145-104-07-97

MISCELLANEOUS WIRE:

Brown (18 Gauge)	6145-104-20-00
Brown (20 Gauge)	6145-104-08-97
Orange (18 Gauge)	6145-104-34-00
Orange with Black Stripes (18 Gauge)	6145-011-35-62
Orange with Blue Stripes (18 Gauge)	6145-011-46-39
Orange with White Stripes (18 Gauge)	6145-011-35-63
Orange with Yellow Stripes (18 Gauge)	6145-011-35-61
Orange (20 Gauge)	6145-104-10-97
Pink (18 Gauge)	6145-011-82-69
Purple (18 Gauge)	6145-104-31-00
Violet (20 Gauge)	6145-104-09-97
Plug, GFI	6145-001-97-90
Cable, 16 Gauge, 3 Wire Romex	6145-001-98-29
Cord, Hubble Plug MC	6145-011-47-23
Cord, S-J	6145-011-49-02
Cord, Power	6145-011-70-28
Cord, 115V Power	6145-309-02-00
Cord, 125V Power, 96“ Long	6145-309-04-00

ORDERING REPLACEMENT HOSE & TUBING/CONDUIT & FITTINGS

Tubing and hose are ordered by the foot. Jackson MSC Inc. reserves the right to require minimum ordering quantities for the items below.

HOSE:

Hose, 3/16” ID x 5/16” OD	4720-601-40-00
Hose, 1/4” ID x .062” Wall, Excelon	4720-111-59-46
Hose, 1/4” ID x 1/2” OD, 300-350 PSI	4720-011-95-43
Hose, 3/8” ID x 5/8” OD, 300 PSI	4720-002-31-63
Hose, 3/8” ID x 5/8” OD, PVC	4720-011-35-41
Hose, 3/8” ID x 3/4” OD, PVC	4720-111-35-41
Hose, 1/2” ID x 3/4” OD	4720-011-94-01
Hose, 1/2” ID, Reinforced	4720-011-63-06
Hose, 5/8” ID x 7/8” OD, PVC	4720-601-14-00
Hose, 3/4” ID x 1” OD	4720-011-94-10
Hose, 3/4” ID, Nylon Reinforced	4720-011-63-02
Hose, 1” ID x 1-1/4” OD, EPDM	4720-111-39-73
Hose, 1-1/4” ID x 1-1/2” OD, Reinforced	4720-601-42-00
Hose, 1-1/4” ID, Reinforced	4720-011-44-47
Hose, 1-1/2” ID, Clear Wire Reinforced	4720-111-34-60
Hose, 2” ID, Nylon Reinforced	4720-011-63-25
Hose, 2” ID, Reinforced Flex Drain	4720-011-63-04
Hose 2” ID x 3” OD, EPDM	4720-011-88-02

TUBING:

Tubing, 1/8” OD, Paraflex	4720-111-58-09
Tubing, 3/16” ID x .54” OD, CPVC	4720-111-35-31
Tubing, 1/4” OD	4720-111-51-65
Tubing, 1/4” OD, Blue	4720-601-11-00
Tubing, 1/4” OD, Red	4720-601-12-00
Tubing, 1/4” OD, White	4720-601-13-00
Tubing, 1/4” OD, Paraflex	4720-111-51-70
Tubing, 1/4” ID x 3/8” OD, Tygon	4720-001-97-65
Tubing, 1/2” ID x 13/16” OD, Polypropolene	4720-601-24-00
Tubing, 5/16” x 7/16” OD, Clear	4720-111-35-34
Tubing, 5/16” ID x 1/2” OD, Flexible	4720-011-35-21
Tubing, 3/8” ID x 1/16” Wall, Clear	4720-601-22-00
Tubing, 3/8” OD, White Polypropolene	4720-011-50-49
Tubing, 5/8” ID with .125” Wall	4720-002-12-20
Tubing, 3/4” ID x 1/8” Wall, Polypropolene	4720-601-25-00
Tubing, 3/4” ID x 1-1/8” OD, Nylon	4720-001-84-01
Tubing, 1” Polybrade	4720-011-69-16
Tubing, 1” ID x 1-3/8” OD, Polypropolene	4720-601-23-00
Tubing, 1-1/2” Polybrade	4720-011-69-17

Jackson dishmachines come with a wide variety of conduit and fittings for use in routing the wires of the machine. The list below provides for most of stock of such items. When ordering, remember that Jackson does not offer pre-cut sections of conduit for your machine, instead it is sold by the foot. Please take into account the slack that will be necessary once installing the new conduit to ensure that it fits correctly. It is recommended that you order at least 6” more conduit than you require to ensure that you have enough for trimming.

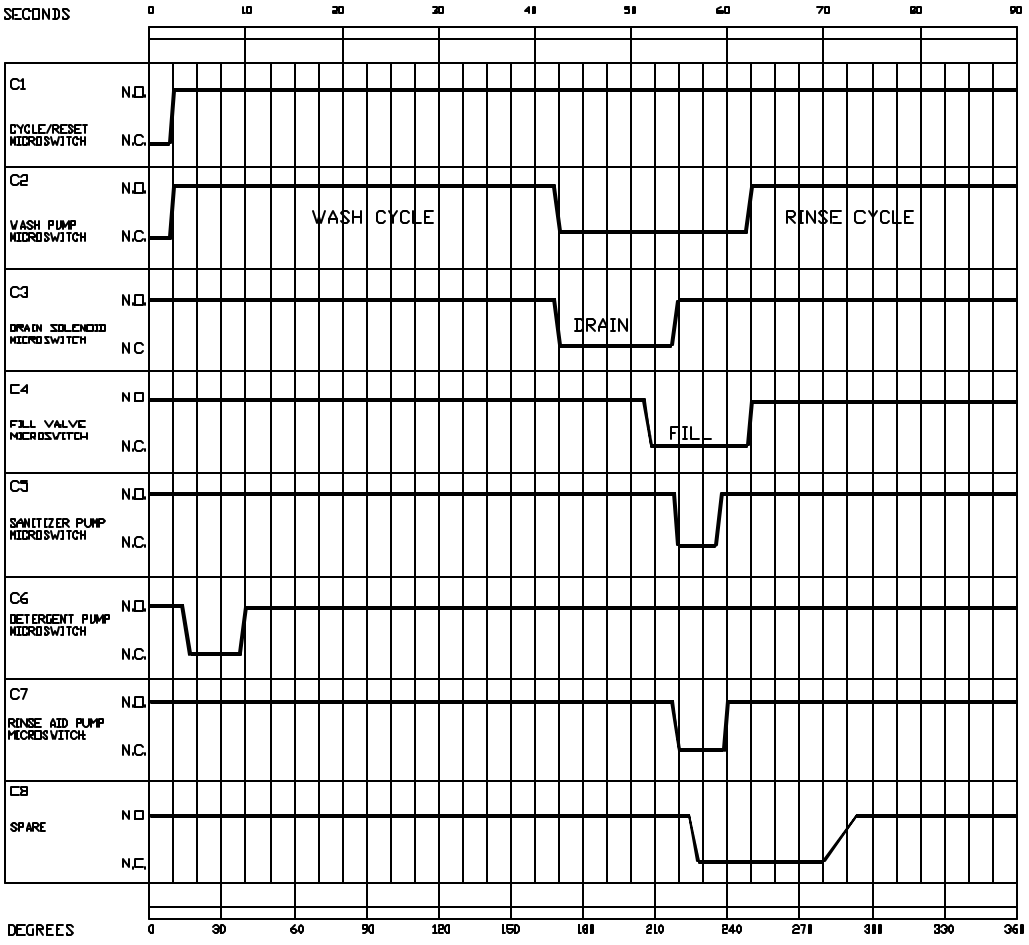
CONDUIT:

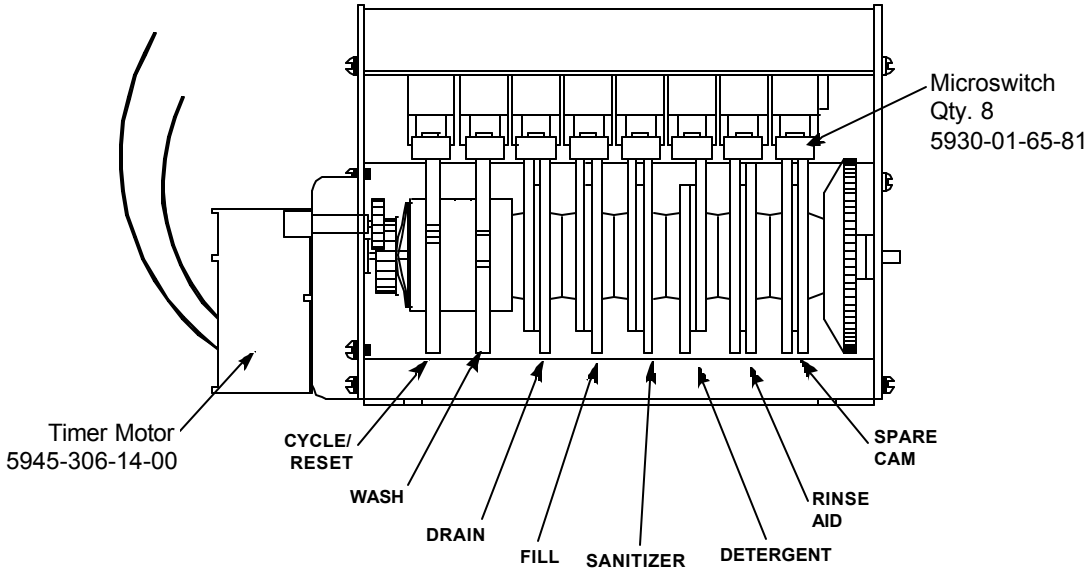
Conduit, 1/2”, Liquidtite	5975-101-25-00
Conduit, 1/2”, Non-Metallic	5975-111-46-57
Conduit, 1/2”, PVC	5975-105-04-00
Conduit, 1/2”, Sealtite	5975-105-01-00
Conduit, 1/2”, Xtraflex	5975-105-06-44
Conduit, 3/8”, Liquidtite	5975-105-02-00
Conduit, 3/4”, Cole-Flex	5975-105-05-00
Conduit, 3/4”, Liquidtite	5975-105-03-00
Conduit, 3/4”, Non-Metallic	5975-011-47-71
Conduit, 3/4” Xtraflex	5975-105-07-44
Conduit, 1”, Carlon	5975-011-68-42

CONDUIT FITTINGS:

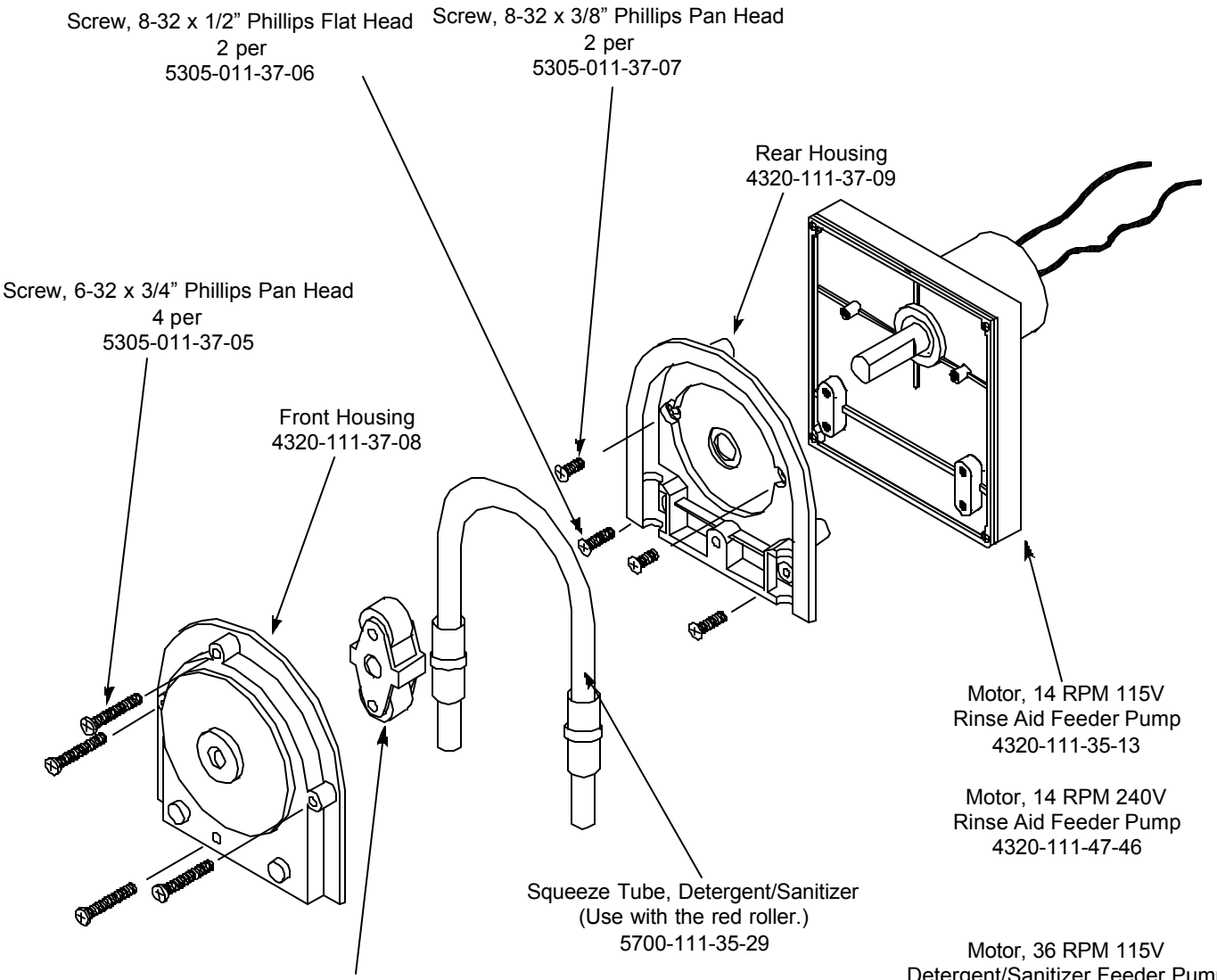
Elbow, Cole-Flex, 1/2”, 90°	5975-205-40-00
Elbow, Xtraflex, 1/2”, 90°	5975-205-44-44
Elbow, Xtraflex, 3/4”, 90°	5975-205-45-44
Fitting, 1/2” Straight	5975-011-45-13
Fitting, 1/2”, Straight, Zinc Plated	5975-111-89-89
Fitting, 1/2”, 45°	5975-011-45-23
Fitting, 1/2”, 45°, Zinc Plated	5975-111-89-86
Fitting, 1/2”, 90°	5975-011-45-14
Fitting, 1/2”, 90°, Zinc Plated	5975-111-89-88
Fitting, 3/4”, Straight	5975-011-47-72
Fitting, 3/4”, 45°	5975-011-47-74
Fitting, 3/4”, 90°	5975-011-47-73
Fitting, 1”, Straight	5975-011-70-75
Fitting, 1”, 90°	5975-011-68-43
Fitting, Cole-Flex, 1/2” Straight	5975-205-03-00
Fitting, Cole-Flex, 3/4” Straight	5975-205-41-00
Fitting, Cole-Flex, 3/4”, 90°	5975-204-42-00
Fitting, Liquidtite, .231 ID/.394 OD	5975-011-49-03
Fitting, Liquidtite, .25 ID/.546 OD	5975-011-65-51
Fitting, Liquidtite, .27 ID/.48 OD	5975-011-59-50
Fitting, Liquidtite, 1/2”, 90°	5975-111-01-00
Fitting, Liquidtite, 3/8”, Straight	5975-205-03-82
Fitting, Liquidtite, 3/8”, 90°	5975-205-02-82
Fitting, Liquidtite, 3/4”, Straight	5975-205-15-02
Fitting, Liquidtite, 3/4”, 45°	5975-205-01-82
Fitting, Liquidtite, 3/4”, 90°	5975-205-07-82
Fitting, Xtraflex, 1/2”, Straight	5975-205-47-44
Fitting, Xtraflex, 3/4”, Straight	5975-205-46-44
Nut, 1-1/4”	5975-011-42-54

8 CAM TIMER

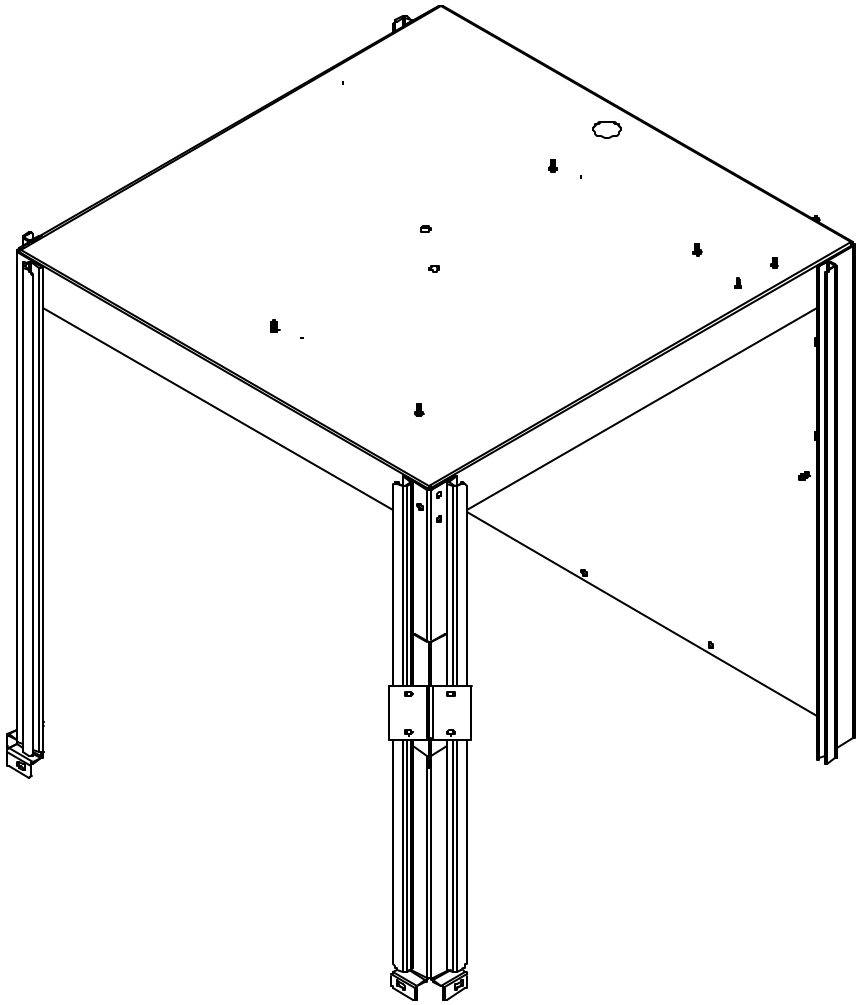

SECONDS
0
10
20
30
40
50
60
70
80
90
C1
CYCLE/RESET MICROSWITCH
N.O.
N.C.
C2
WASH PUMP MICROSWITCH
WASH CYCLE
RINSE CYCLE
C3
DRAIN SOLENOID MICROSWITCH
DRAIN
N.C
C4
FILL VALVE MICROSWITCH
FILL
C5
SANITIZER PUMP MICROSWITCH
C6
DETERGENT PUMP MICROSWITCH
C7
RINSE AID PUMP MICROSWITCH
C8
SPARE
N.C.
DEGREES
0
30
60
90
120
150
180
210
240
270
300
330
360


Microswitch
Qty. 8
5930-01-65-81
Timer Motor
5945-306-14-00
CYCLE/
RESET
WASH
DRAIN
FILL
SANITIZER
DETERGENT
RINSE
AID
SPARE
CAM

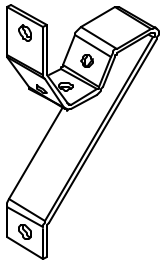
CHEMICAL FEEDER PUMP ASSEMBLY



CONSERVER XL HOOD ASSEMBLY (Starting with S/N 04D10286)



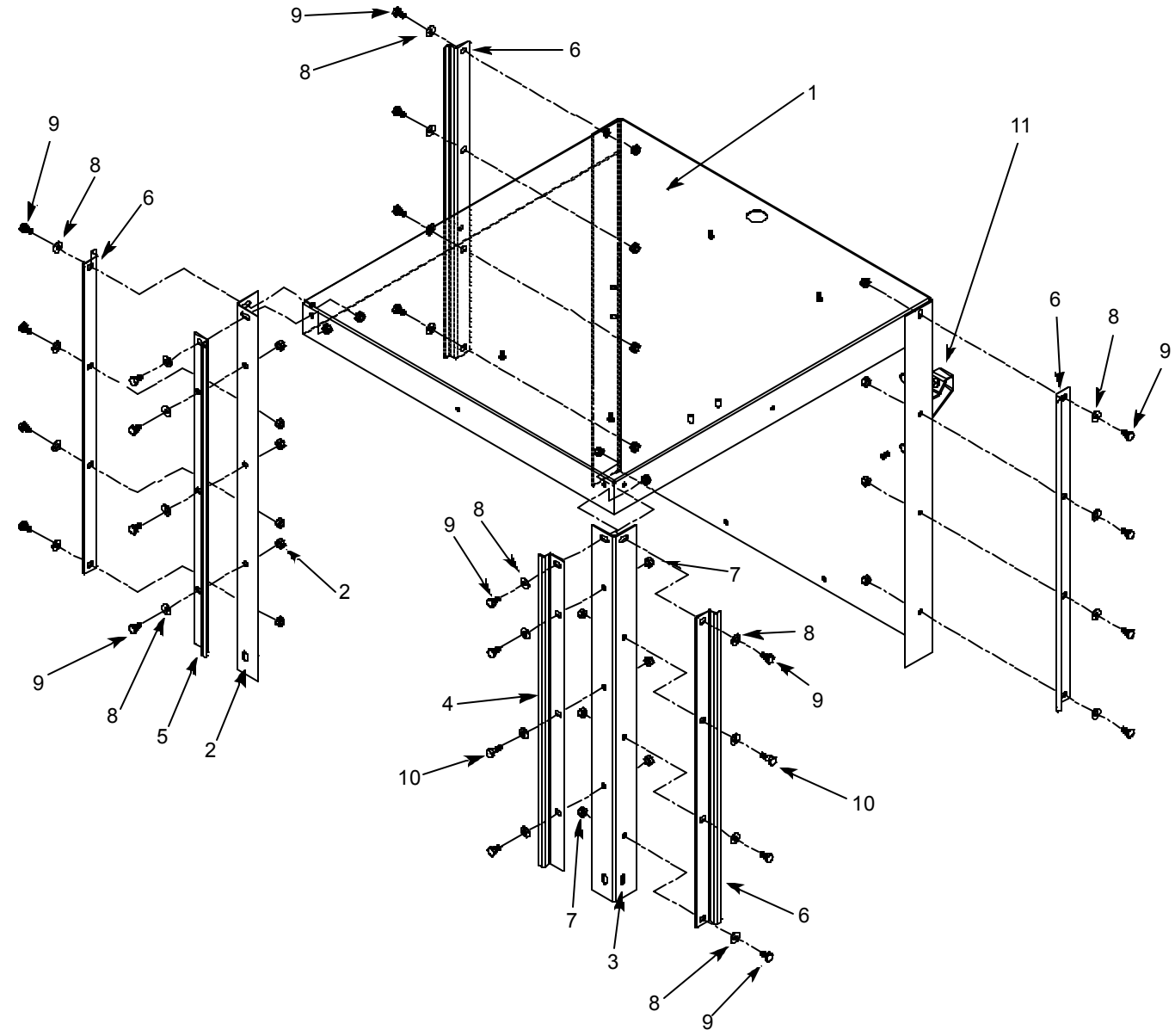
Hood Weldment
5700-002-91-38



Bracket, Cantilever Support
5700-031-88-00

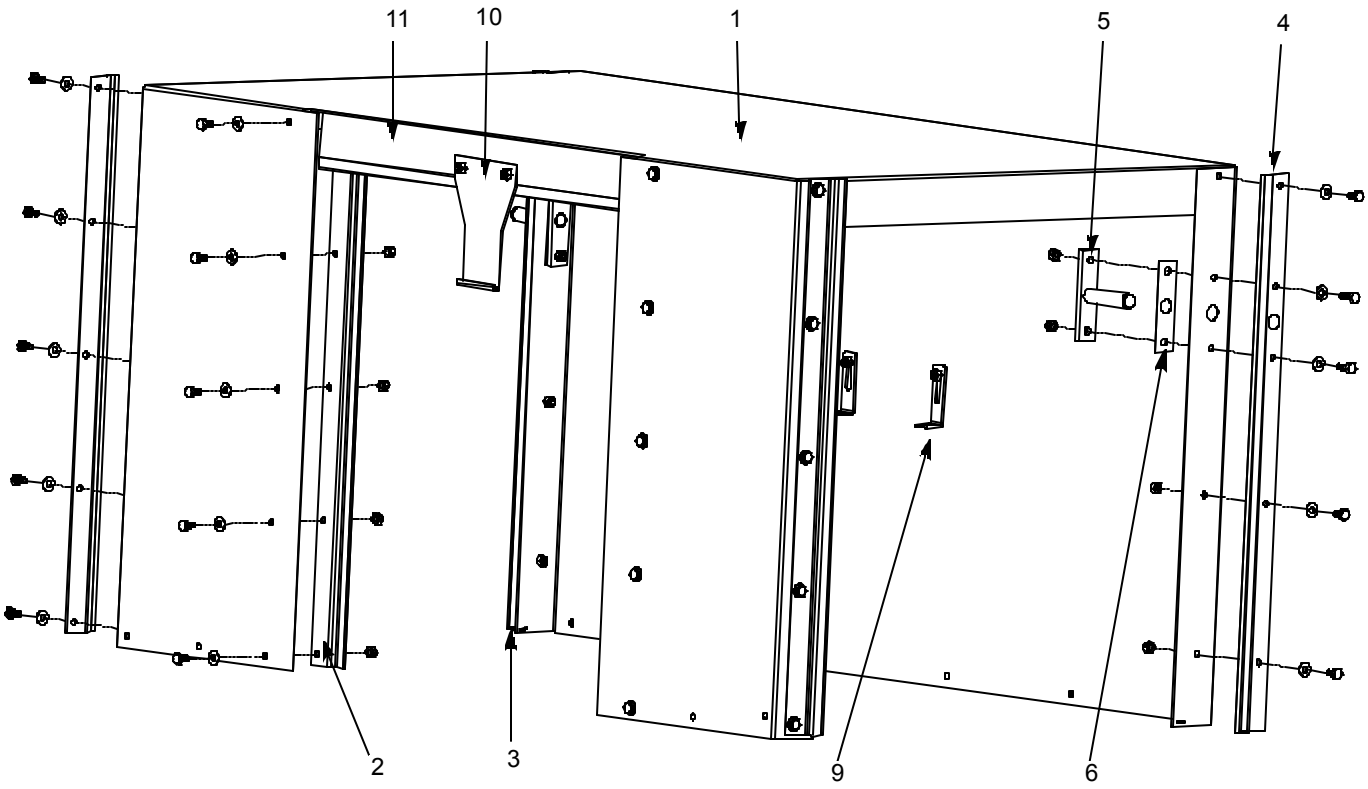
Wear Button
5700-011-88-01

CONSERVER XL HOOD ASSEMBLY (Prior to S/N 04D10286)



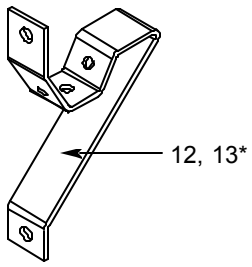
ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Hood Weldment	5700-002-04-44
2	1	Support, Left, Hood	5700-002-00-18
3	1	Support, Right, Hood	5700-002-00-17
4	1	Right Door Guide	5700-002-05-74
5	1	Left Door Guide	5700-002-05-75
6	4	Door Guide	5700-002-05-73
7	26	Locknut, 1/4"-20 with Nylon Insert, S/S	5310-374-01-00
8	26	Washer, 1/4"-20	5311-174-01-00
9	22	Bolt, 1/4"-20 x 1/2" Long	5305-274-02-00
10	2	Bolt, 1/4"-20 x 3/4" Long	5305-274-04-00
11	2	Support, Cantilever Arm Assembly	5700-002-04-45
	2	Suppor Bracket	5700-031-88-00
	6	Wear Buttons	5700-011-88-01

CONSERVER XL2 HOOD ASSEMBLY



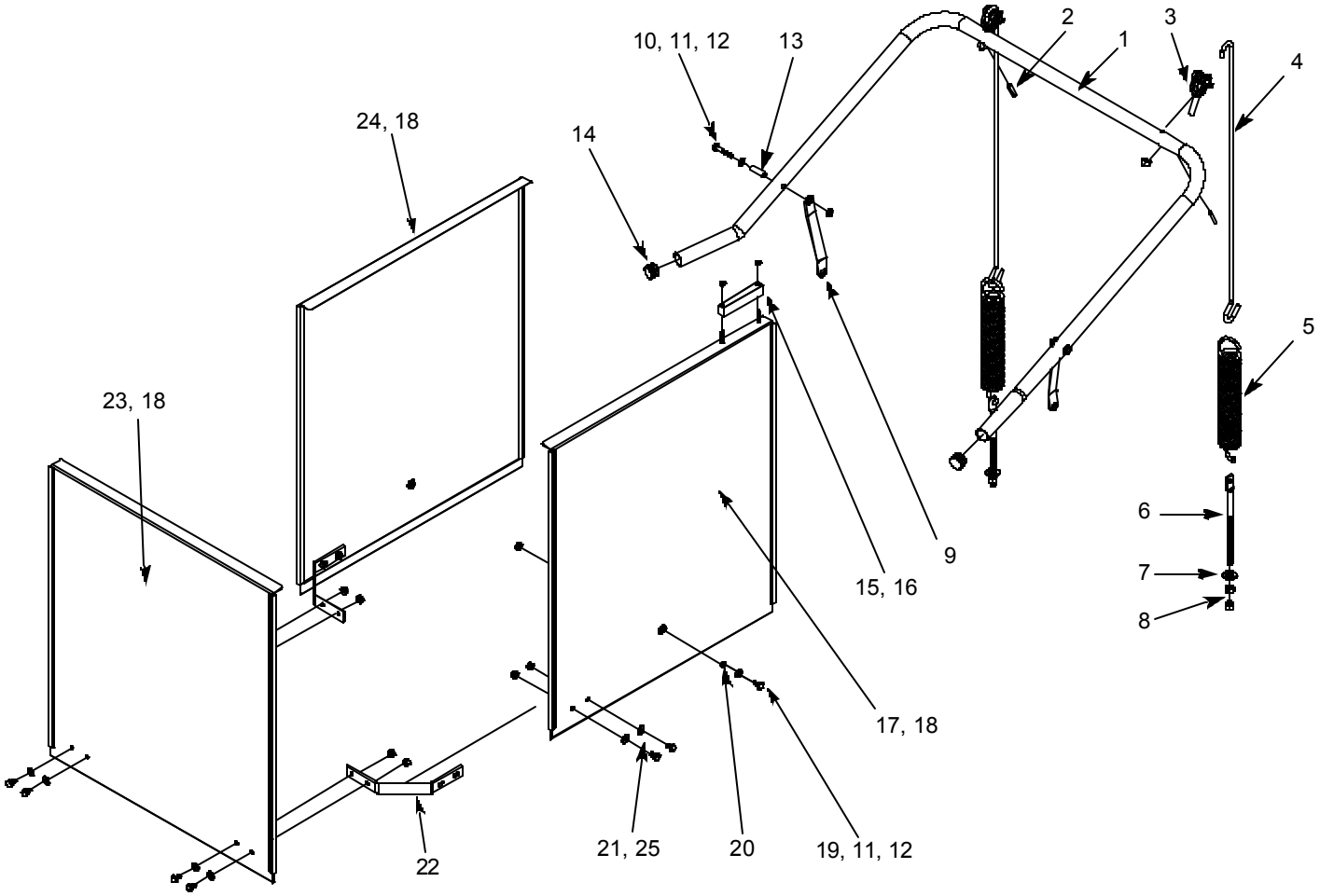
OLD STYLE: If your unit uses items 5 and 6, it is the old style hood weldment. Items 3 thru 6 are used only with the old style Hood Weldment. The hood will have the proper mounting holes in the rear door guides and in the hood itself.

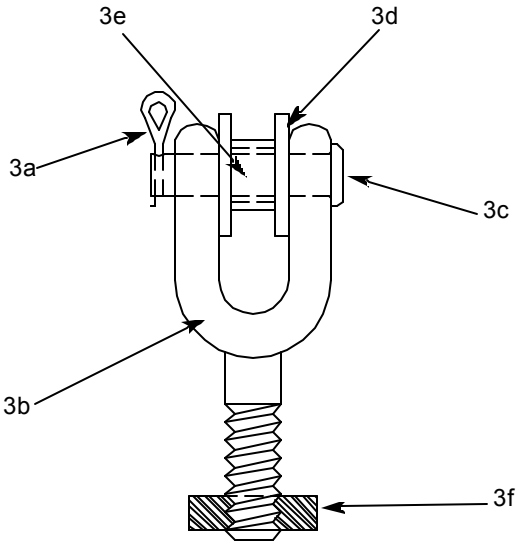
NEW STYLE: If your unit does not use items 5 and 6, then it is the new style hood weldment. Items 12 thru 15 are used only with the new style Hood Weldment. The hood will have two places on the back of the hood to attach the cantilever support bracket assembly shown to the right.



ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Hood Weldment, Old Style	5700-002-21-67
1	1	Hood Weldment, New Style	5700-002-60-76
2	4	Door Guide	5700-021-44-94
3	1	Door Guide, Left Rear	5700-021-33-16
4	1	Door Guide, Right Rear	5700-021-33-15
5	2	Arm Support Weldment	5700-011-43-52
6	2	Arm Support Weldment Gasket	5700-111-36-01
7*	1	Front Door Stop (Not Shown)	5700-021-60-27
8*	1	Stiffener, Hood Support (Not Shown)	5700-002-47-39
9	2	Manifold L-Bracket	5700-011-34-63
10	1	Door Catch	5700-011-46-50
11	1	Hood Stiffener	5700-002-08-24
12*	2	Bracket, Cantilever Support	5700-031-88-00
13*	6	Wear Button	5700-011-88-01
14	1	Door Guide, Left Rear, New Style	5700-021-84-71
15	1	Door Guide, Right Rear, New Style	5700-021-84-70

CANTILEVER ARM (DOUBLE BRACKET MOUNT)



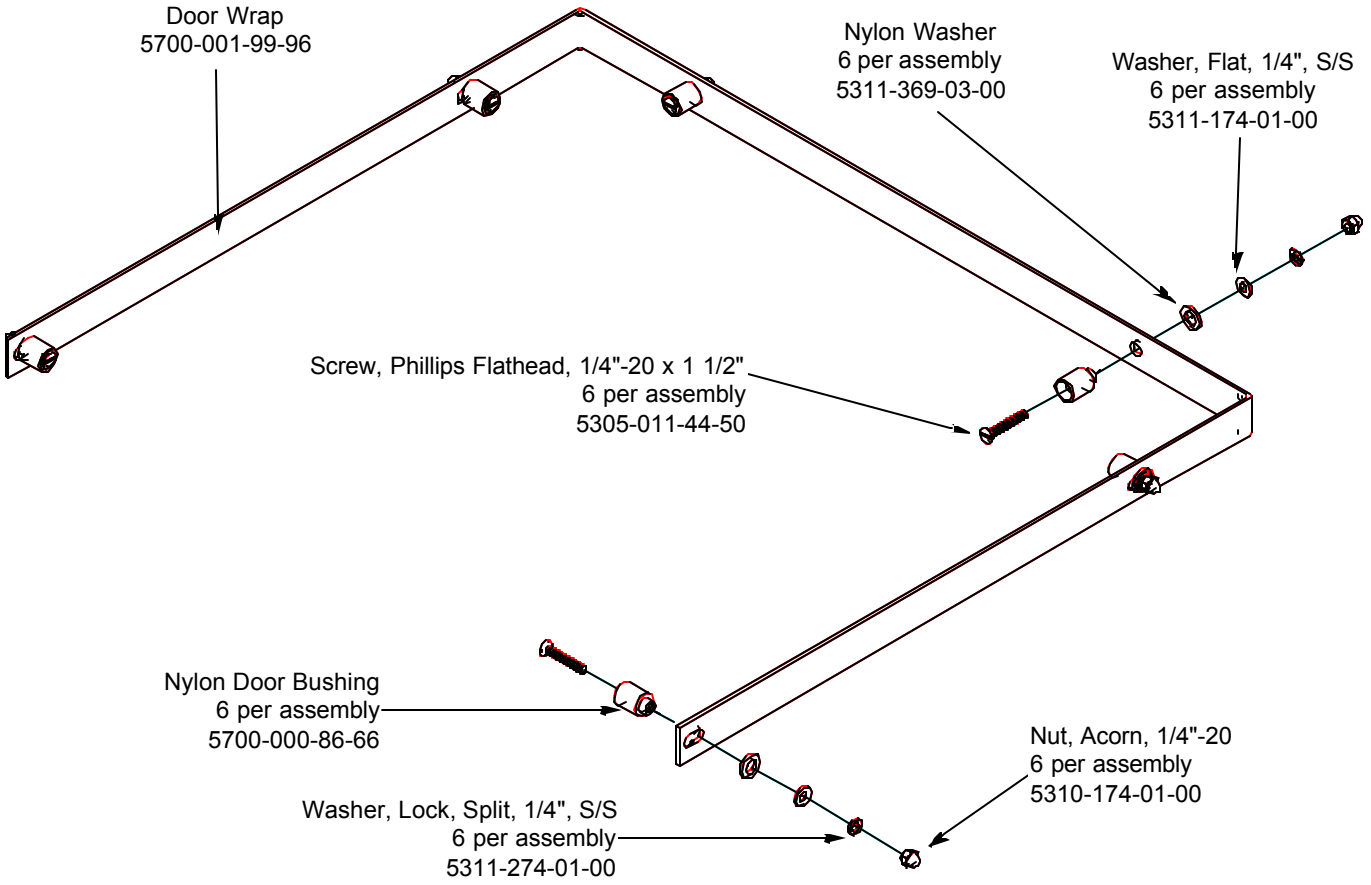


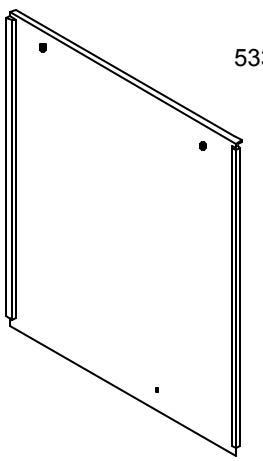
CANTILEVER ARM (DOUBLE BRACKET MOUNT) (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Arm, Cantilever, Conserver XL (Prior to S/N 04D10286)	5700-002-00-20
1	1	Arm, Cantilever, Conserver XL (Starting with S/N 04D10286)	5700-031-50-67
1*	1	Arm, Cantilever, Conserver XL2	5700-002-60-65
2	1	Spring Pin, 1/4” Dia. x 1 1/8” Long	5315-407-06-00
3	2	Yoke Assembly	5700-000-75-77
3a	1	Cotter Pin	5315-207-01-00
3b	1	Yoke	5700-000-75-78
3c	1	Clevis Pin, 5/16” x 1 3/8”	5315-700-01-00
3d	2	Nylon Washer	5311-369-03-00
3e	1	Bushing	3120-100-03-00
3f	2	Locknut, 3/8”-16 S/S Hex Center	5310-256-04-00
4	2	Rod, Spring, Conserver XL (Prior to S/N 04D10286)	5700-000-69-45
4	2	Rod, Spring, Conserver XL (Starting with S/N 04D10286)	5700-002-10-52
4	2	Rod, Spring, Conserver XL2	5700-002-29-38
5	2	Spring, Conserver XL	5340-109-02-00
5	2	Spring, Conserver XL2	5340-109-02-00
6	2	Bolt, Hanger Eye 3/8"-16	5306-956-05-00
7	2	Washer, Impeller 3/8” I.D. x 7/8” O.D.	5311-176-02-00
8	4	Nut, 3/8”-16 S/S Hex	5310-276-01-00
9	2	Cantilever Arm Connector	5700-011-90-99
10	2	Screw, 1/4"-20 x 1 1/2" Long S/S	5305-274-23-00
11	2	Washer, 1/4" ID S/S	5311-174-01-00
12	2	Locknut, 1/4”-20 S/S Hex with Nylon Insert, Low Profile	5310-374-02-00
13	2	Sleeve, Cantilever Arm	5700-000-85-69
14	2	Plug, Cantilever Arm	5340-011-35-00
15	1	Magnet, Reed Switch	5930-111-51-68
16	2	Locknut, 8-32 S/S Hex with Nylon Insert	5310-272-02-00
17	1	Right Door Weldment Assembly, Conserver XL (Starting with S/N 04D10286)	5700-002-30-88
	1	Right Door Weldment with Studs, Conserver XL (Starting with S/N 04D10286)	5700-002-29-85
17a*	1	Right Door Assembly, Conserver XL2	5700-002-21-63
	1	Right Door Only, Conserver XL2	5700-021-63-62
18	6	Door, Guides	5700-111-33-59
19	2	Screw, 1/4"-20 x 1/2" Long S/S	5305-274-02-00
20	2	Spacer, PB Bolt	5700-000-29-40
21	4	Locknut, 1/4”-20 S/S Hex with Nylon Insert	5310-374-01-00
22	2	Door Connector Bracket, Conserver XL Only	5700-021-33-39
22*	4	Door Stop, Conserver XL2 Only	5700-011-46-30
23	1	Front Door Assembly, Conserver XL (Starting with S/N 04D10286)	5700-002-30-89
	1	Front Door Only, Conserver XL (Starting with S/N 04D10286)	5700-002-29-83
23a*	1	Front Door Weldment Assembly, Conserver XL2	5700-002-21-58
	1	Front Door Weldment with Studs, Conserver XL2	5700-002-21-59
24	1	Left Side Door Assembly, Conserver XL (Starting with S/N 04D10286)	5700-002-30-87
	1	Left Side Door Only, Conserver XL (Starting with S/N 04D10286)	5700-002-29-86
24a*	1	Left Side Door Weldment Assembly, Conserver XL2	5700-002-21-60
	1	Left Side Door WeldmentOnly, Conserver XL2	5700-002-21-61
25*	2	Bracket, Cantilever Arm Support	5700-031-88-00
26*	6	Wear Button, 1/2" Dia. UHMW	5700-011-88-01

* Represents an item not shown.

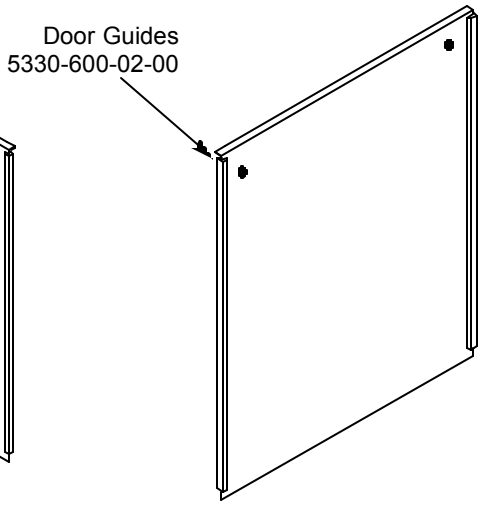
CONSERVER XL DOOR & WRAP ASSEMBLIES (Prior to S/N 04D10286)





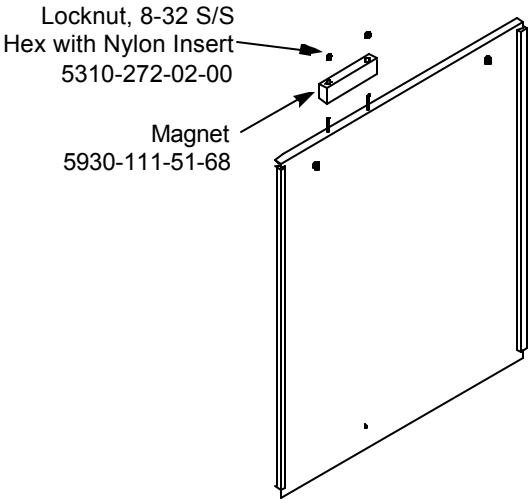
Conserver XL Left Door Assembly
with Door Guides
5700-002-04-51

Conserver XL Left Door
5700-002-03-01



Conserver XL Front Door Assembly
with Door Guides
5700-002-04-50

Conserver XL Front Door
5700-002-01-28

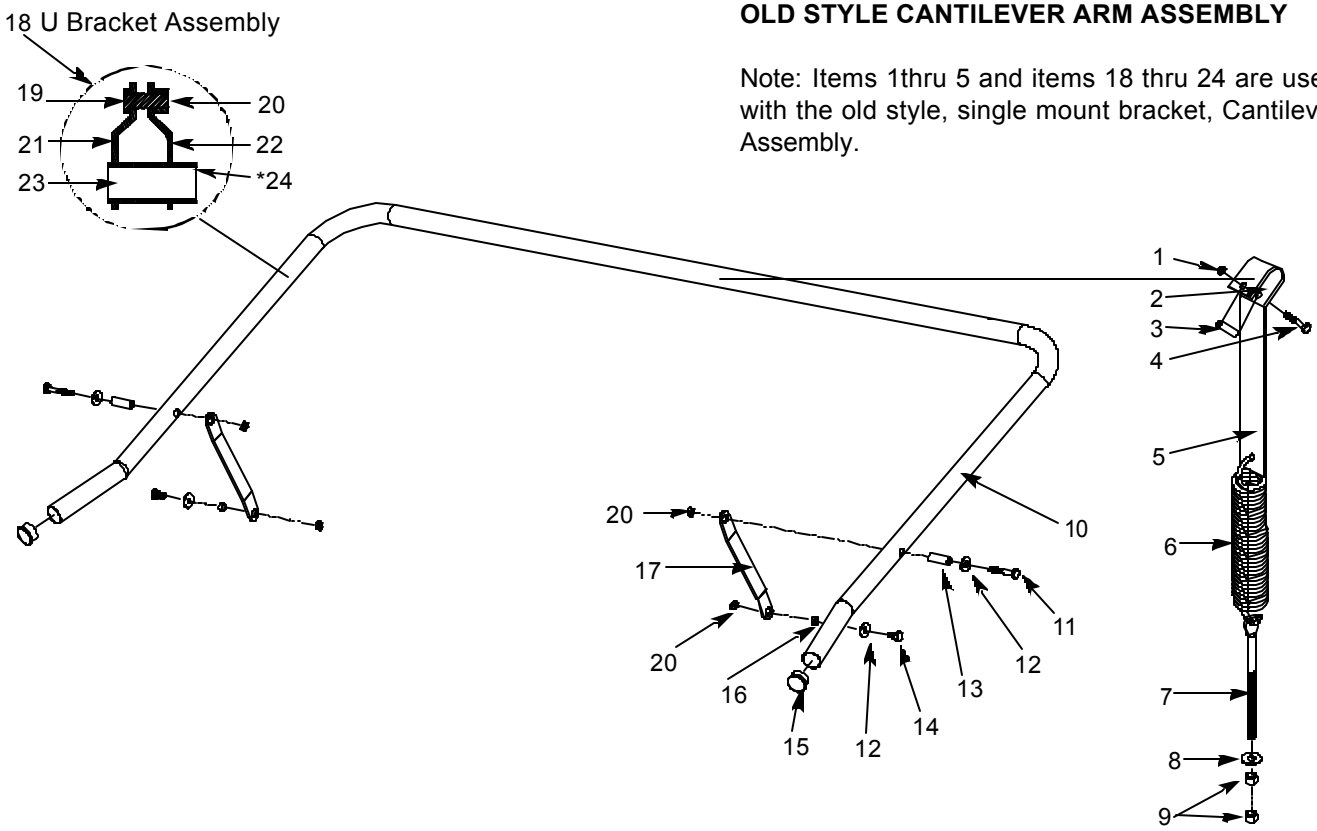


Conserver XL Right Door Assembly
with all shown parts
5700-002-04-52

CONSERVER XL2 CANTILEVER ARM ASSEMBLY (1 BRACKET MOUNT)

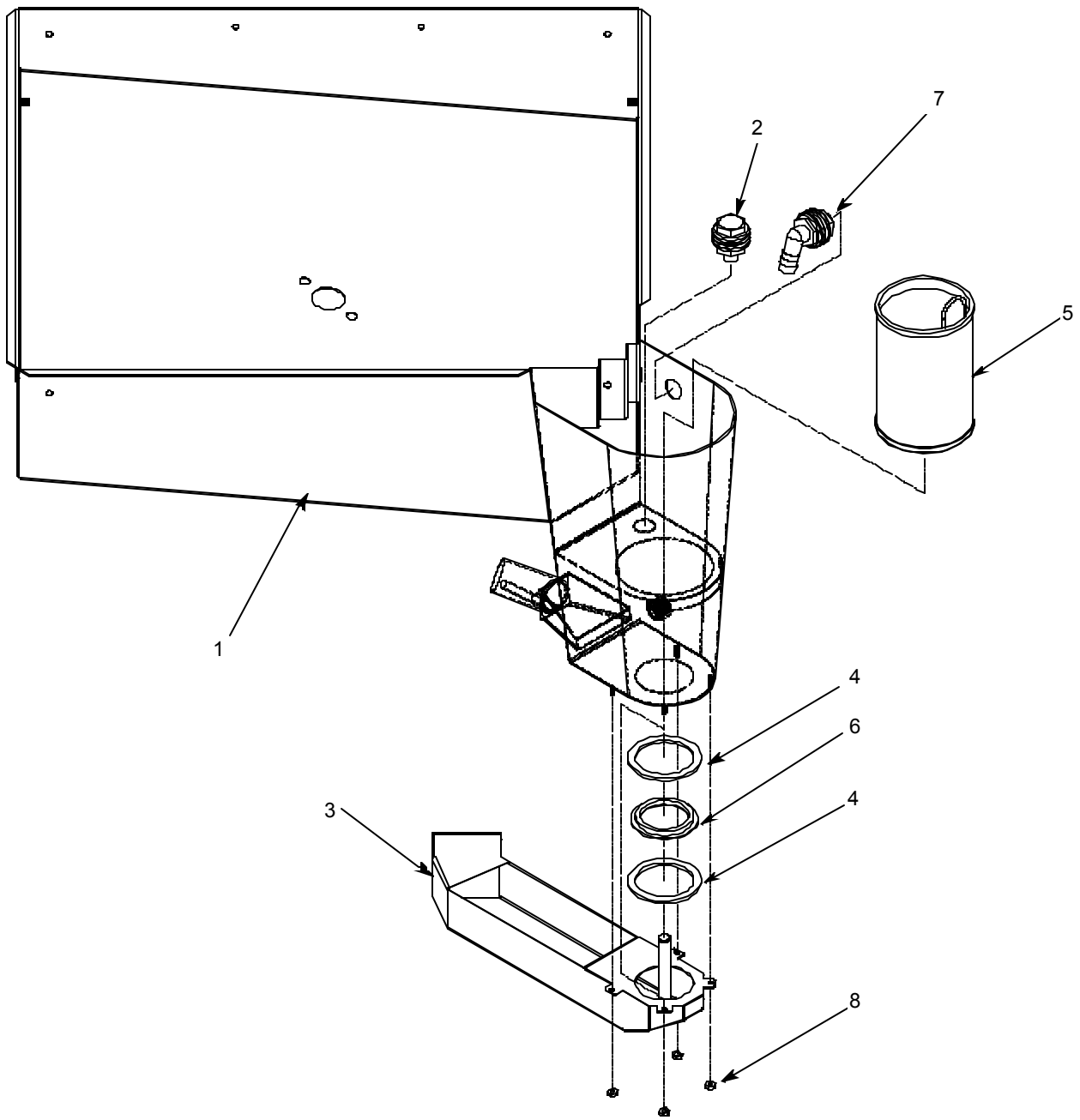
OLD STYLE CANTILEVER ARM ASSEMBLY

Note: Items 1thru 5 and items 18 thru 24 are used only with the old style, single mount bracket, Cantilever Arm Assembly.



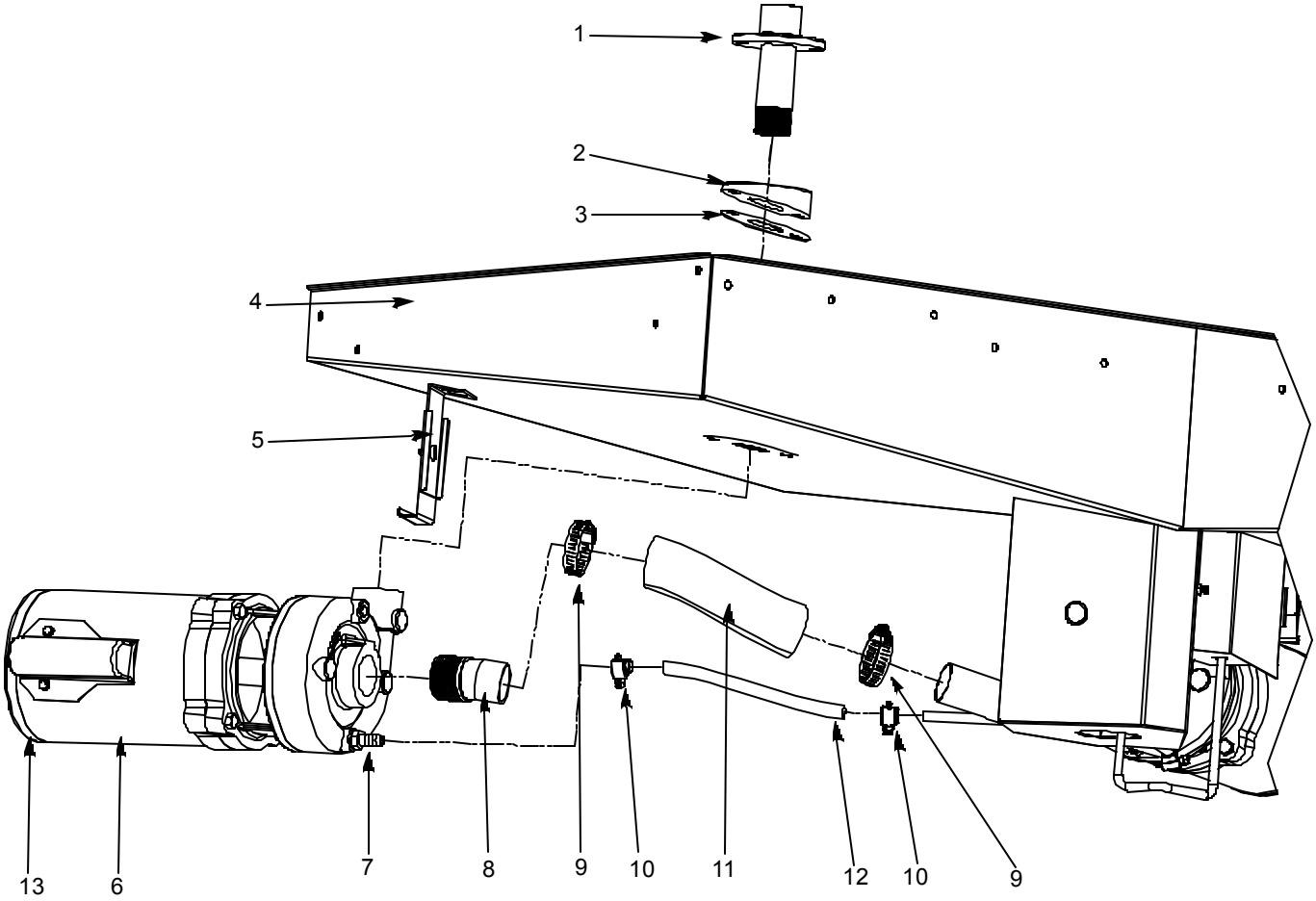
ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Hex Nut, 1/4"-20 with Nylon Insert, S/S	5310-374-01-00
2	1	Wear Strip UHMW	5700-011-34-50
3	1	Sleeve	5700-000-01-53
4	1	Bolt, 1/4"-20 x 1 3/4", S/S	5305-274-10-00
5	1	Link, Spring to Cantilever Arm	5700-021-34-49
6	1	Cantilever Spring	5340-111-35-22
7	1	Cantilever Eye Bolt	5700-011-45-99
8	1	Washer, Impeller	5311-176-02-00
9	2	Nut, 3/8"-16 Hex, S/S	5310-276-01-00
10	1	Cantilever Arm	5700-031-45-38
11	2	Hex Head Bolt, 1/4"-20 x 1 1/2", S/S	5305-274-23-00
12	4	Washer, Flat 1/4", S/S	5311-174-01-00
13	2	Cantilever Arm Sleeve	5700-000-85-69
14	2	Hex Head Bolt, 1/4"-20 x 1/2", S/S	5305-274-02-00
15	2	Endcap, Cantilever Arm	5340-011-35-00
16	2	Bolt Spacer	5700-000-29-40
17	2	Cantilever Arm Lever	5700-011-90-99
18	2	U Bracket Assembly	5700-011-43-72
19	2	Bolt, Hex Head, 1/4"-20 x 3/4"	5305-274-04-00
20	5	Hex Nut, 1/4"-20 with Nylon Insert, Low Profile	5310-374-02-00
21	1	Bracket, Inner Half, U	5700-021-43-00
		Bracket, Outer Half, U & Bearing Assembly	5700-011-43-54
22	1	Bracket, Outer Half, U	5700-021-43-04
23	1	Sleeve Bearing	3120-011-43-53
24*	2	Retaining Ring	5340-011-33-62

CONSERVER XL WASH TUB ASSEMBLY



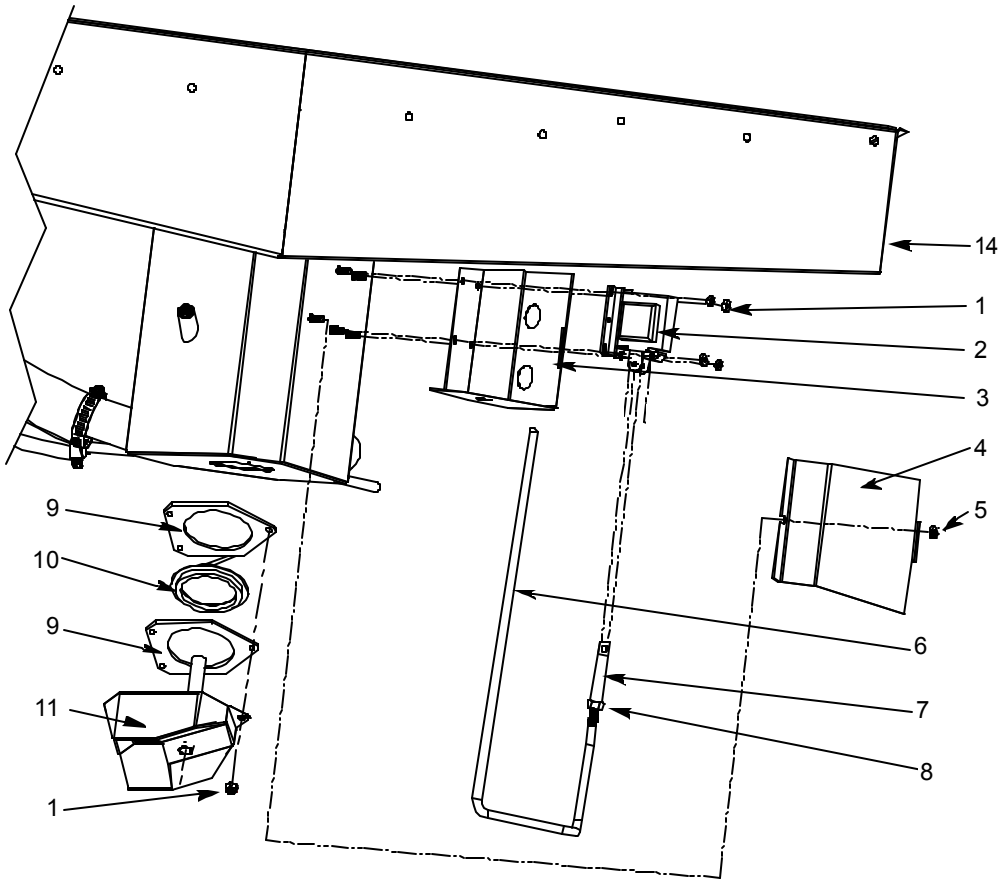
ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Tub Weldment, Conserver XL (Prior to S/N 04D10286)	5700-002-04-38
1	1	Tub Weldment, Conserver XL (Starting with S/N 04D10286)	5700-002-78-30
2	1	Fitting, Chemical Drip	5700-002-05-62
3	1	Spillway Weldment	5700-002-04-41
4	2	Drain Seat Gasket	5700-002-04-42
5	1	Sump Strainer	5700-002-06-25
6	1	Drain Seat Insert	5700-021-34-38
7	1	Bulkhead to 1/2" Hosebarb Fitting	4730-011-45-21
8	4	Locknut, 10-24, with Nylon Insert	5310-373-01-00

CONSERVER XL2 TUB ASSEMBLY (LEFT FRONT VIEW)



ITEM	QTY	DESCRIPTION	Mfg. No.
1	2	Lower Wash Manifold Weldment	5700-031-46-00
2	2	Casting, Manifold Wedge	9515-011-46-61
3	4	Manifold Gasket	5700-111-35-03
4	1	Wash Tub Weldment	5700-002-21-50
5	2	Wash Motor Support Assembly	5700-021-66-48
	1	Bracket, Pump Support Weldment	5700-021-66-47
	1	Bracket, Lower Pump Support	5700-021-66-46
	1	Nut, 1/4"-20 Serrated Nut	5310-011-66-49
6	2	Wash Motor 60 Cycle	6105-002-69-78
7	1	Fitting, Brass Elbow	4730-002-18-96
8	2	Pump Inlet Nipple	5700-021-46-84
9	4	Hose Clamp, Regular, 1 5/16" - 2 1/4"	4730-719-01-37
10	4	Hose Clamp, Mini, 7/16" - 25/32"	4730-011-36-05
11	2	Hose, 1 1/2" ID x 7 3/4" Long	5700-111-33-52
12	2	Hose, 3/8" ID x 12" Long	5700-002-69-73
13	2	Hose Clamp, Regular, 5 5/8" - 6"	4730-011-34-90

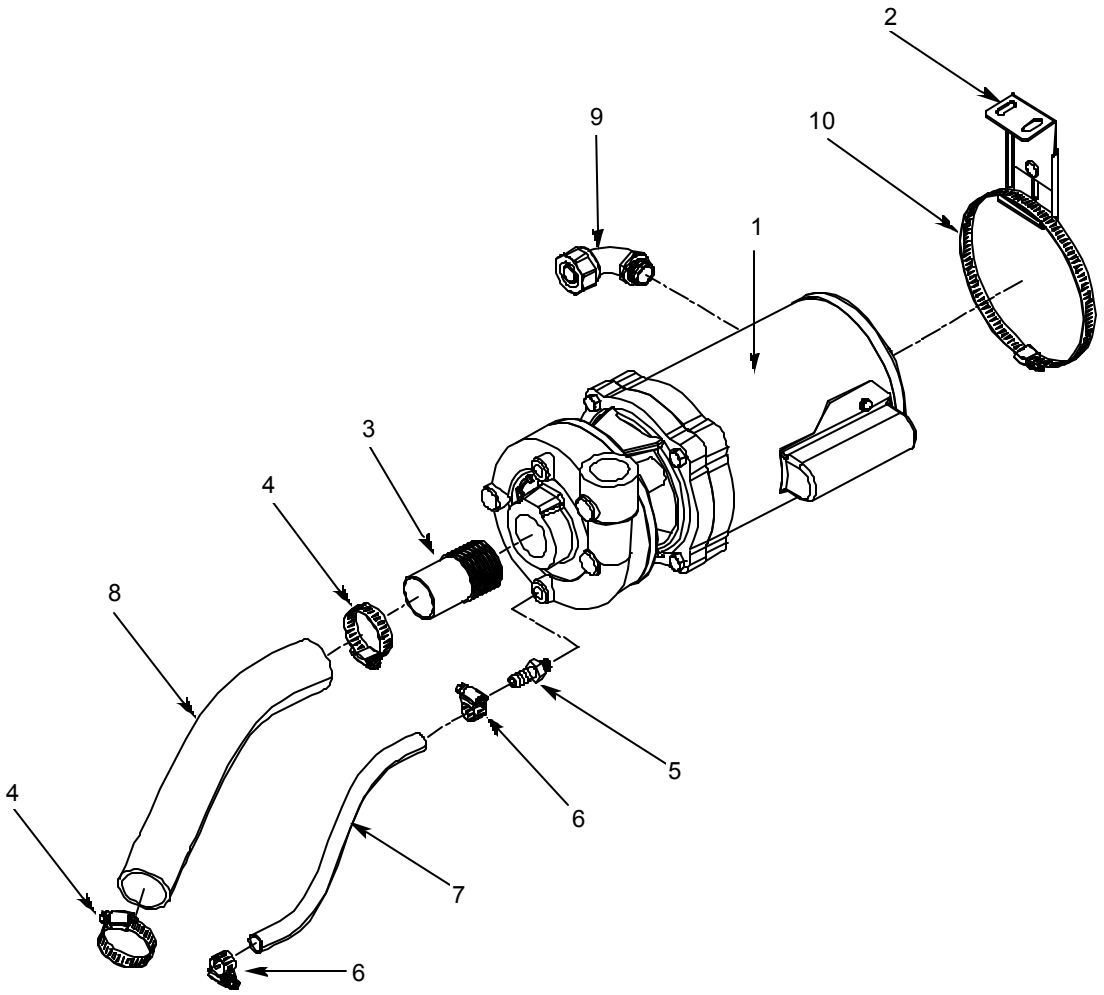
CONSERVER XL2 SERIES TUB ASSEMBLY (RIGHT FRONT VIEW)



* Represents an item not shown.

ITEM	QTY	DESCRIPTION	Mfg. No.
1	7	Locknut, 10-24 S/S Hex with Nylon Insert	5310-373-01-00
2	1	Drain Solenoid	4810-200-11-00
3	1	Drain Solenoid Box	5700-021-37-53
4	1	Drain Solenoid Box Cover	5700-031-33-27
5	1	Locknut, 1/4"-20 S/S Hex with Nylon Insert	5310-374-01-00
6	1	Drain Link Assembly	5700-002-38-21
6	1	Drain Link	5700-031-46-52
7	1	Drain Link Connector	5700-002-38-10
8	1	Hex Nut, 5/16"-18	5310-275-01-00
9	2	Spillway Gasket	5700-111-34-52
10	1	Drain Seat Insert (Stainless Ring)	5700-021-34-38
11	1	Spillway Weldment	5700-031-37-86
12*	1	Cotter Pin, 1/8" x 1"	5315-011-60-09
13*	1	Solenoid Stop	5700-000-66-40
14	1	Hole Plug	4730-011-60-21

CONSERVER XL WASH MOTOR ASSEMBLY



ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Pump & Motor Assembly, 50 HZ	6105-002-19-87
	1	Pump Assembly, 50 HZ	5700-002-85-38
	1	Motor Assembly, 50 HZ	6105-002-85-36
1	1	Pump & Motor Assembly, 60 HZ	6105-002-69-78
	1	Pump Assembly, 60 HZ	5700-002-79-51
	1	Motor Assembly, 60 HZ	6105-002-79-61
2	1	Pump Support Assembly	5700-002-05-88
3	1	Nipple, Pump Outlet	5700-021-33-50
4	2	Clamp, 1 5/16" to 2 1/4"	4730-719-01-37
5	1	Fitting, Brass Elbow	4730-002-18-96
6	2	Clamp, 7/16" to 25/32"	4730-011-36-05
7	1	Hose, 3/8" ID x 12" Long (115 Volt Machine)	5700-002-69-73
7	1	Hose, 3/8" ID x 14" Long (240 Volt Machine)	5700-002-04-40
8	1	Hose, 1 1/2" ID x 7 3/4" Long	5700-111-33-52
9	1	Connector, Liquidtite, 90°	5975-111-01-00
10	1	Clamp, 5 5/8" to 6"	4730-011-34-90
11	2	Locknut, 1/4"-20, with Nylon Insert, S/S	5310-374-01-00

MOTOR & PUMP ASSEMBLY

Complete Pump & Motor Assembly, 60HZ
6105-002-69-78

Pump Only Assembly, 60HZ
(Area indicated within box, Casing is included)
5700-002-79-51

Pump Casing (Not shown), 60HZ
5700-002-85-01

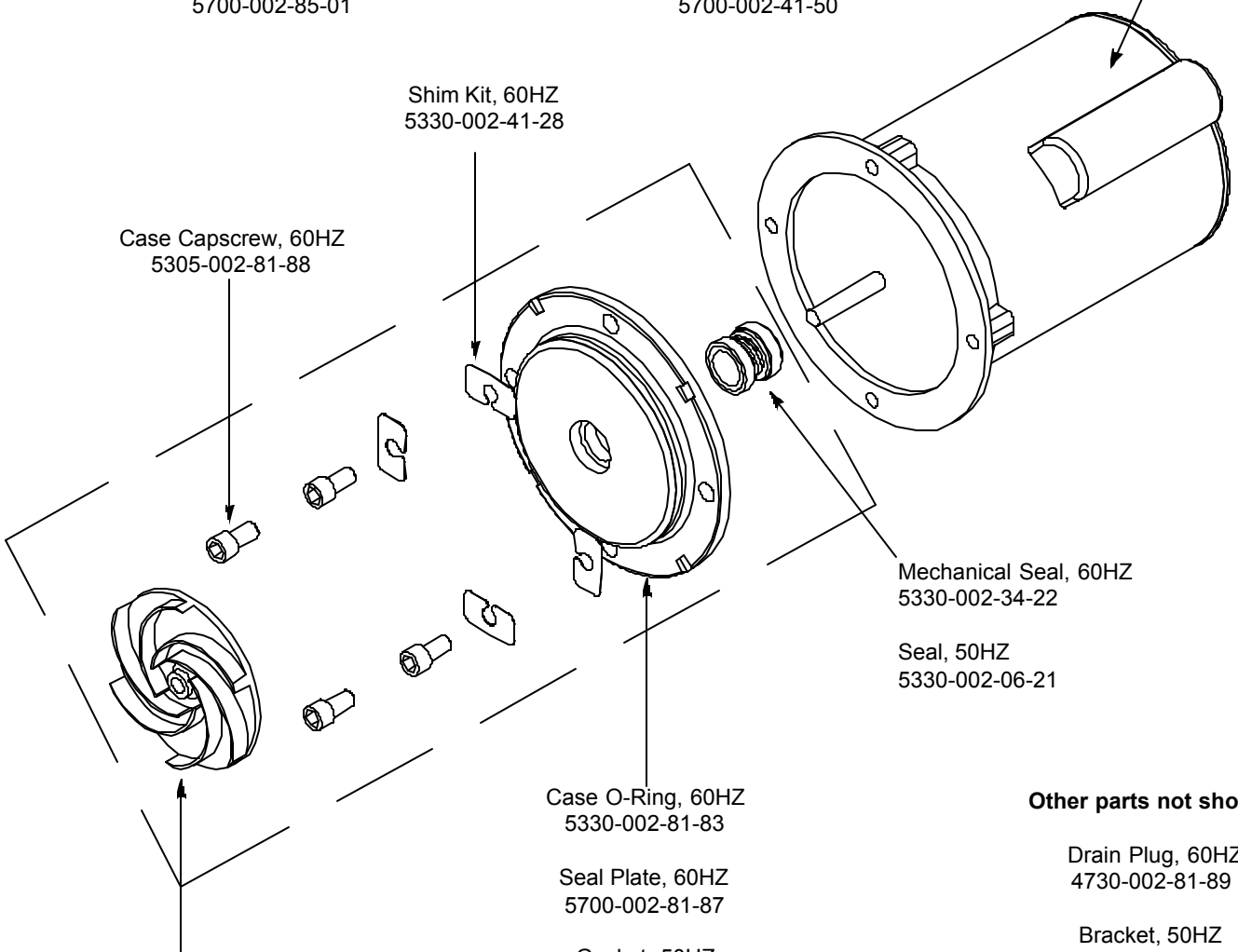
Complete Pump & Motor Assembly, 50HZ
6105-002-19-87

Pump Only Assembly, 50HZ
(Area indicated within box, Casing is included)
5700-002-85-38

Pump Casing (Not shown), 50HZ
5700-002-41-50

Motor Only, 60HZ
6105-002-79-61

Motor Only, 50HZ
6105-002-85-36



Shim Kit, 60HZ
5330-002-41-28

Case Capscrew, 60HZ
5305-002-81-88

Mechanical Seal, 60HZ
5330-002-34-22

Seal, 50HZ
5330-002-06-21

Case O-Ring, 60HZ
5330-002-81-83

Seal Plate, 60HZ
5700-002-81-87

Gasket, 50HZ
5330-002-41-48

Impeller Assembly, 60HZ
5700-002-81-86

Impeller Assembly, 50HZ
5700-002-41-49

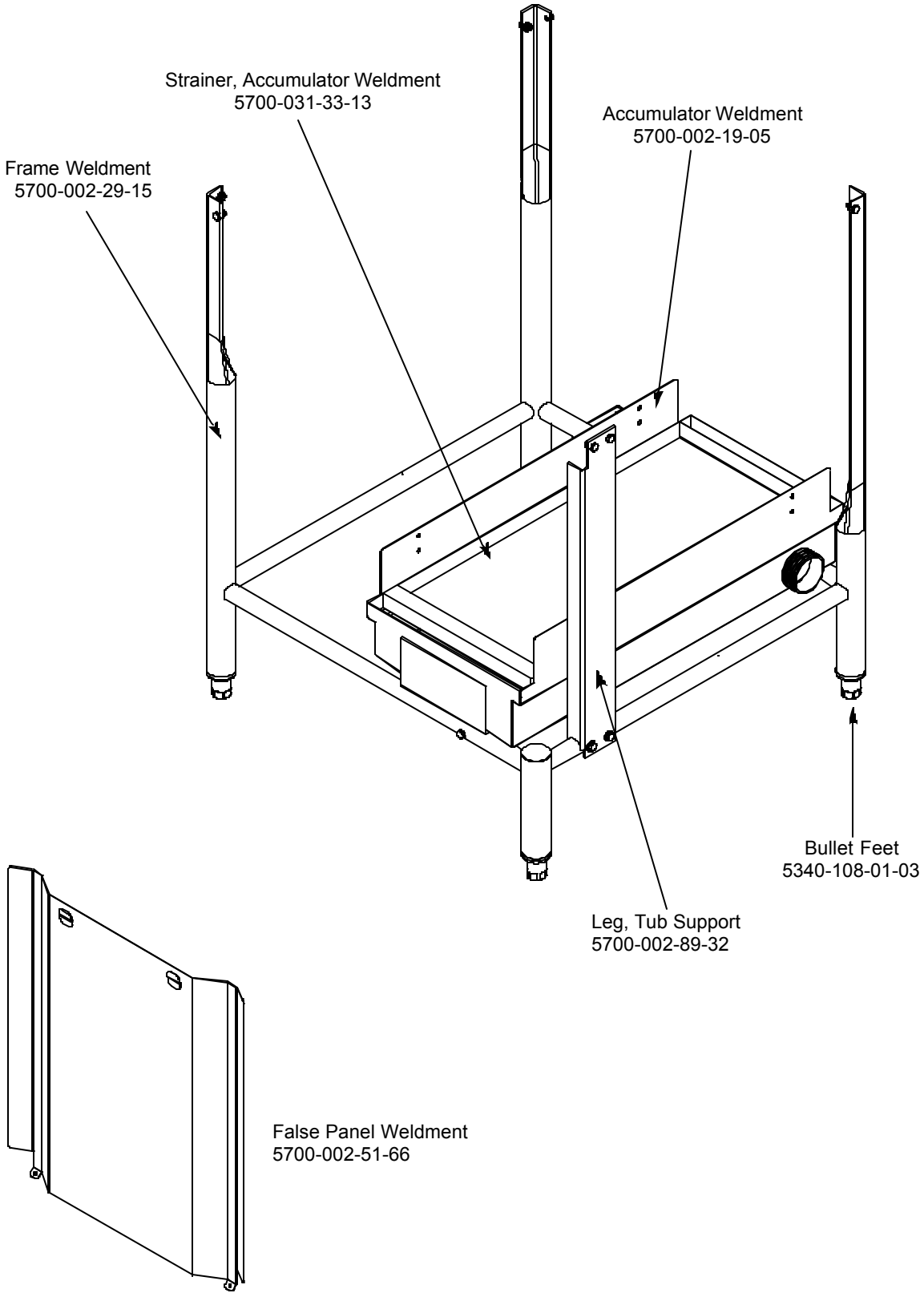
Other parts not shown.

Drain Plug, 60HZ
4730-002-81-89

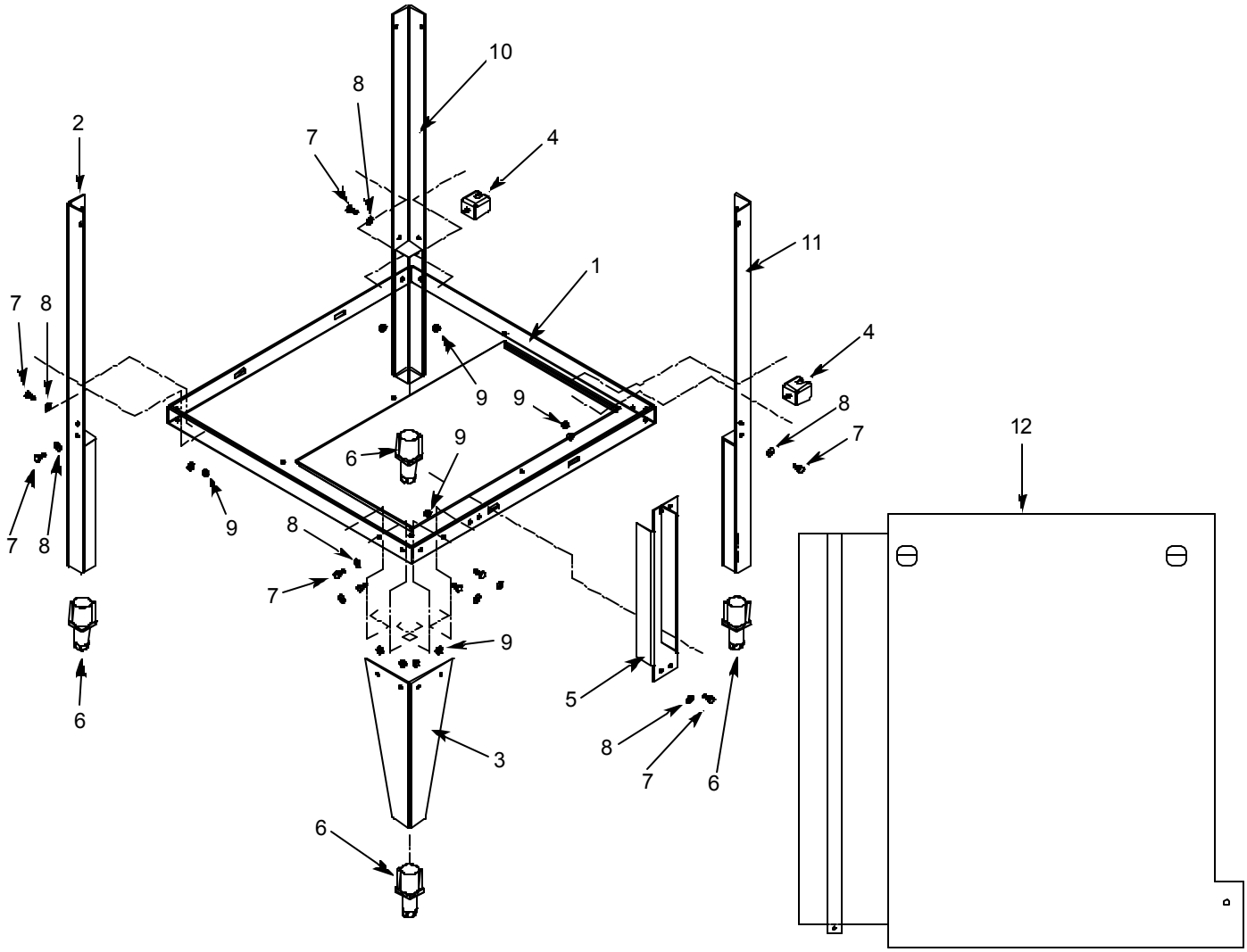
Bracket, 50HZ
5700-002-06-22

Shaft Adapter, 50HZ
5700-011-95-49

CONSERVER XL FRAME ASSEMBLY (Starting with S/N 04D10286)



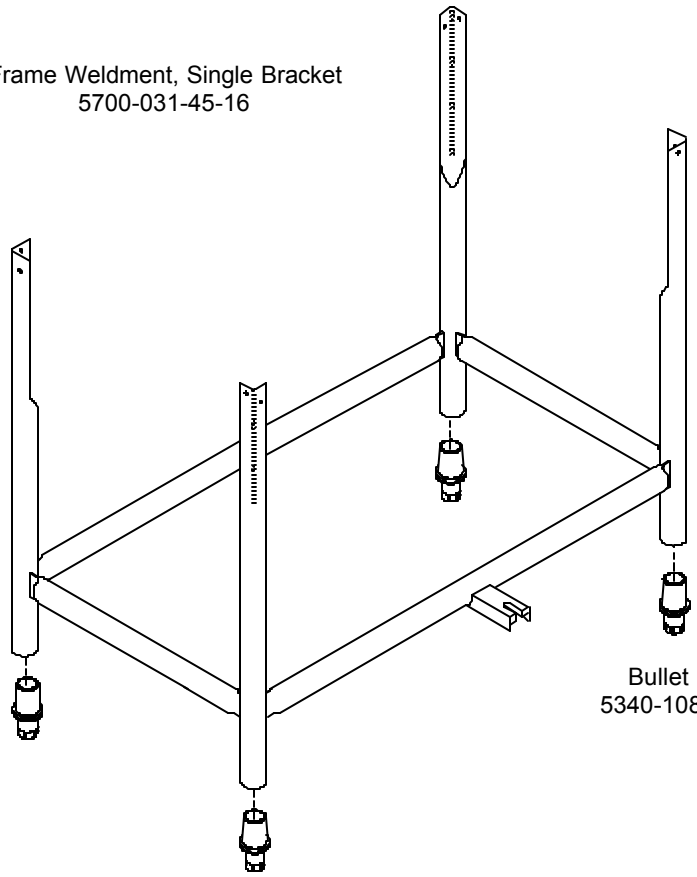
CONSERVER XL FRAME ASSEMBLY & LEFT HANDED FALSE PANEL WELDMENT (Prior to S/N 04D10286)



ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Lower Frame, Conserver XL	5700-001-99-80
2	1	Leg, Front Left Frame Assembly	5700-002-04-36
3	1	Leg, Short, Conserver XL	5700-002-03-72
4	2	Bracket, Spring Mounting	5700-002-04-37
5	1	Tub Support	5700-001-99-83
6	4	Bullet Feet	5340-108-02-06
7	9	Bolt, 1/4"-20 x 1/2" Long	5305-274-02-00
8	9	Washer, Flat, 1/4" ID	5311-174-01-00
9	11	Locknut, 1/4"-20, with Nylon Insert, S/S	5310-374-01-00
10	1	Leg, Rear Left Frame Assembly	5700-002-24-69
11	1	Leg, Rear Right Frame Assembly	5700-002-23-96
12	1	Left Handed False Panel Weldment	5700-002-30-95

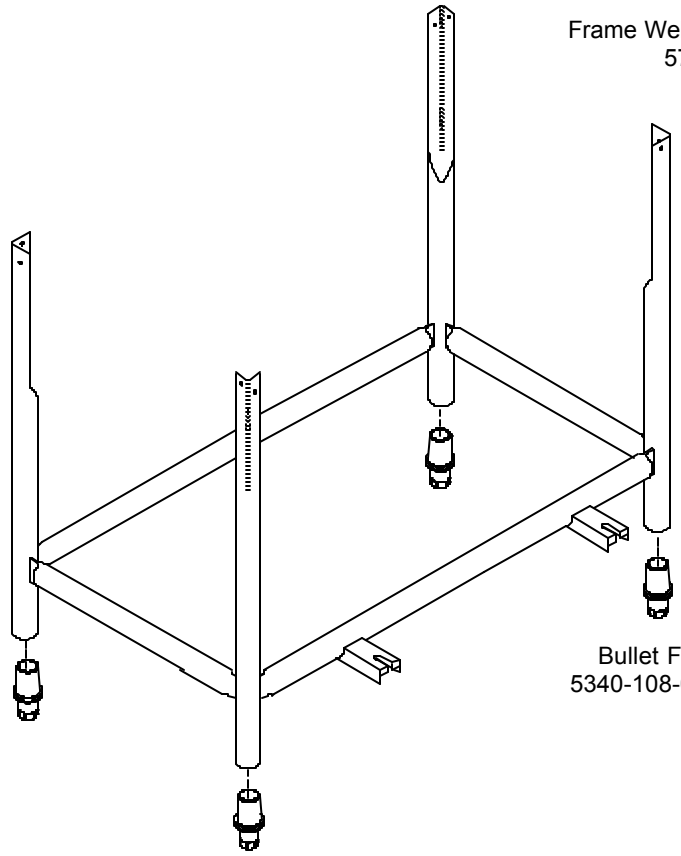
CONSERVER XL2 SERIES FRAME WELDMENT

Frame Weldment, Single Bracket
5700-031-45-16



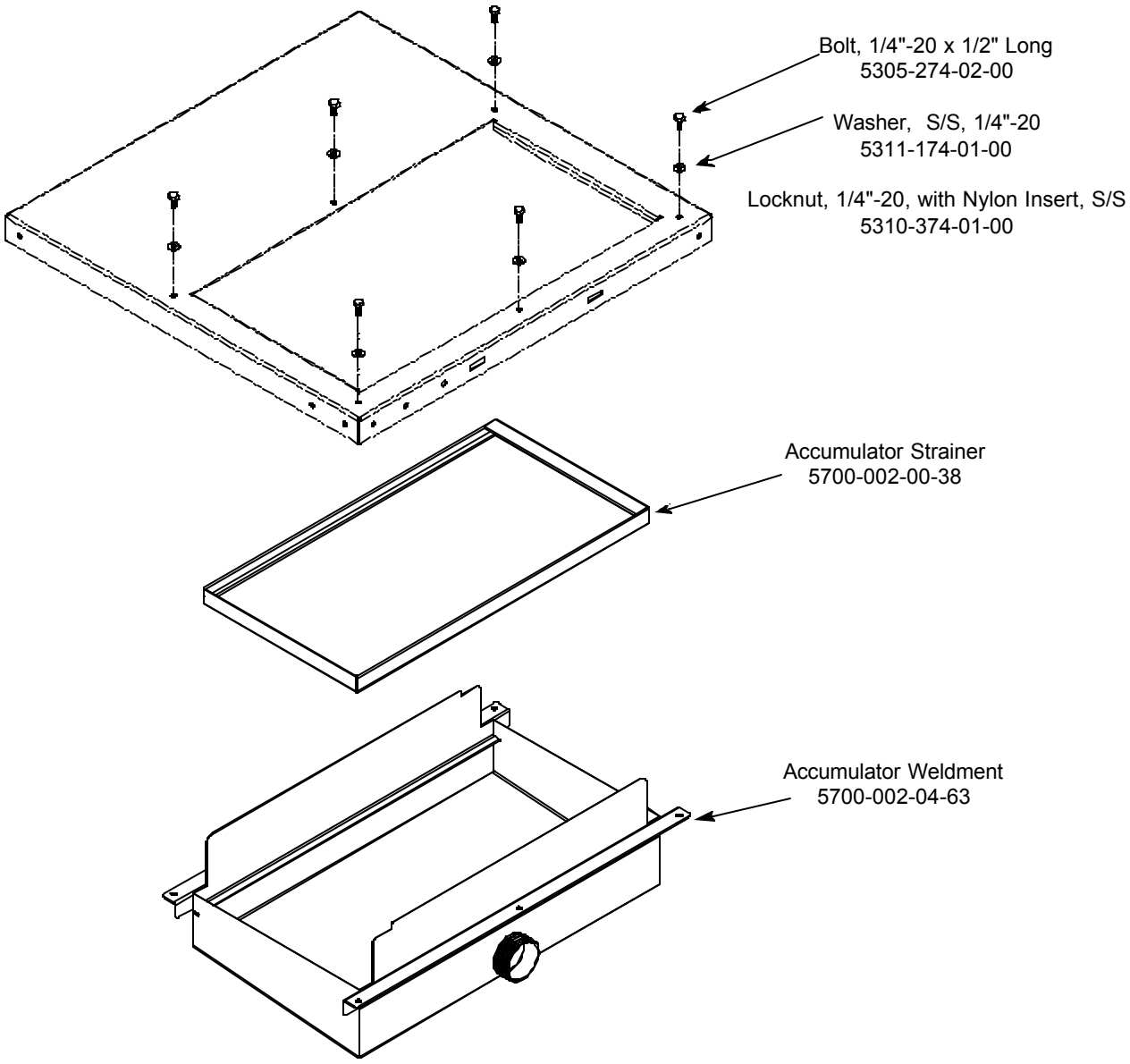
Bullet Foot
5340-108-01-03

Frame Weldment, Double Bracket
5700-002-61-22



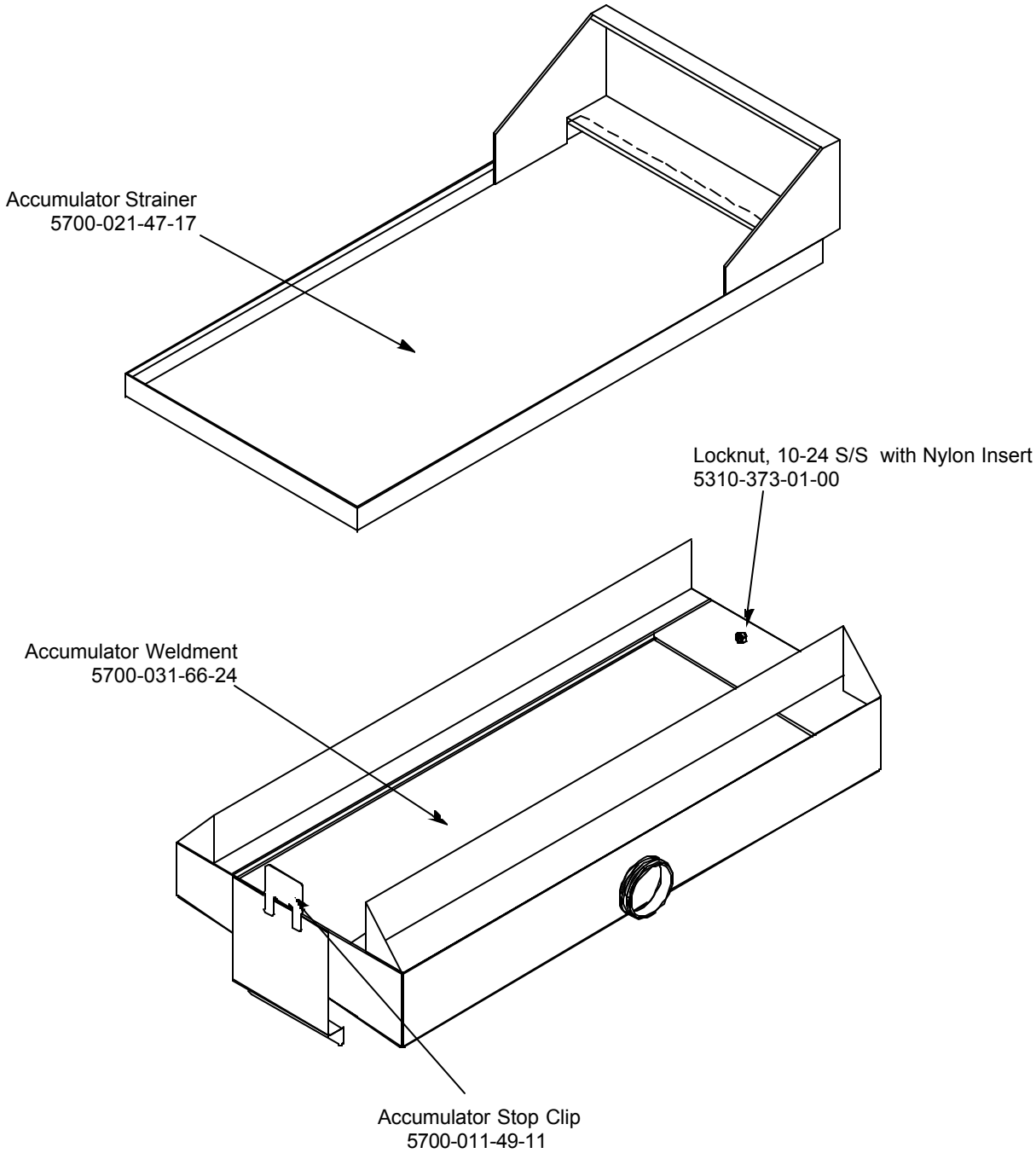
Bullet Foot
5340-108-01-03

CONSERVER XL ACCUMULATOR ASSEMBLY (Prior to S/N 04D10286)

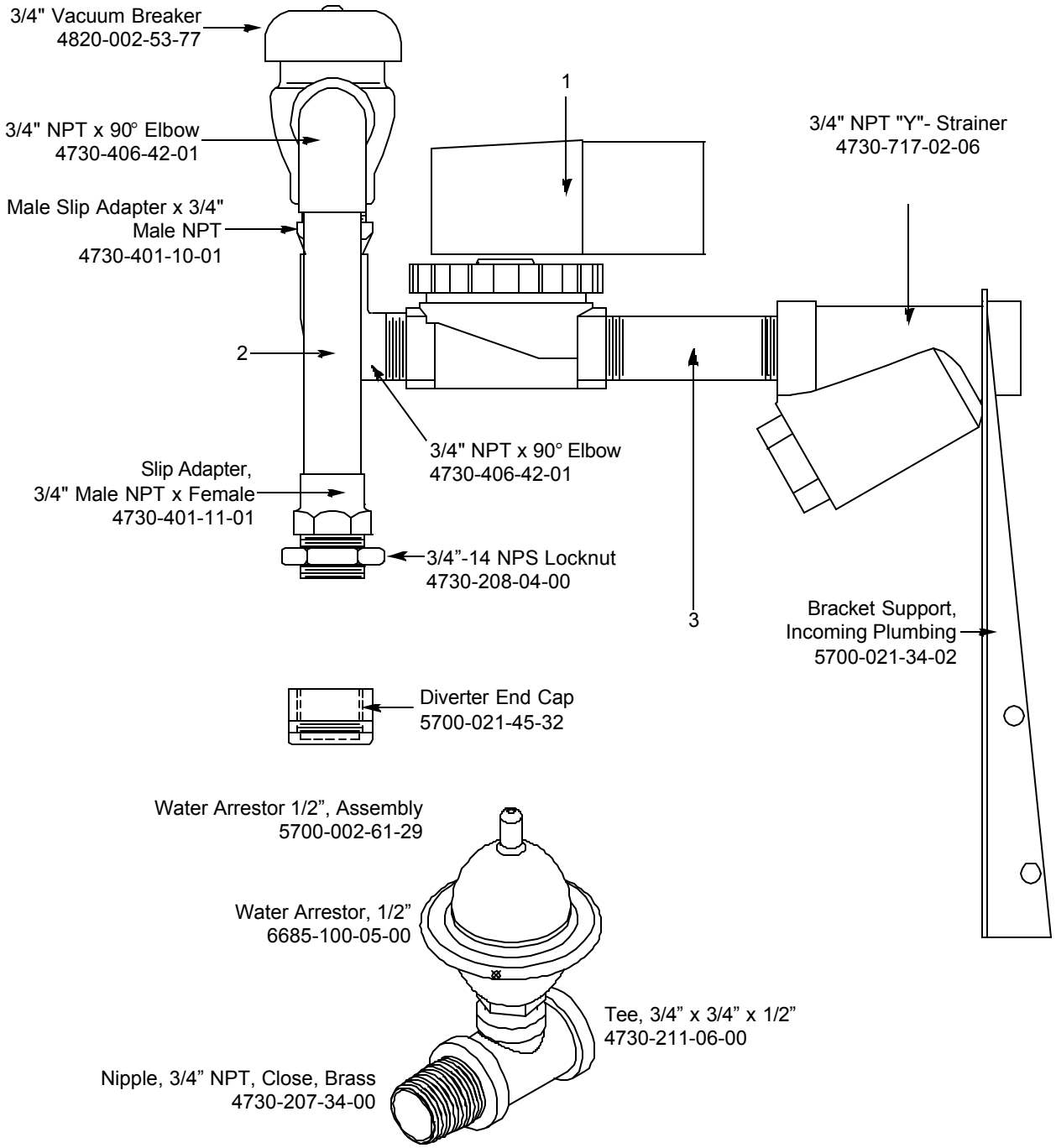


CONSERVER XL2 SERIES ACCUMULATOR ASSEMBLY

NOTE: This is a rear view of the accumulator as it would appear installed on the dishmachine.

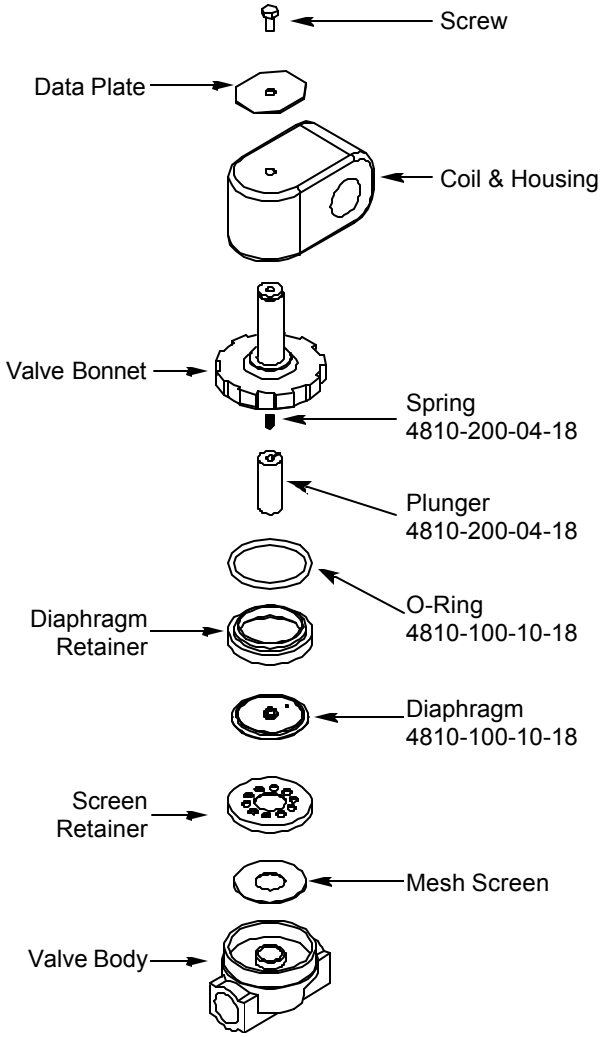


INCOMING PLUMBING ASSEMBLY



ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	3/4" NPT, Solenoid Valve, 120 Volt	4810-100-53-00
1	1	3/4" NPT, Solenoid Valve, 240 Volt (Conserver XL Export Only)	4810-100-03-18
2	1	3/4" x 4" Copper Tube, Conserver XL (Prior to S/N 04D10286)	5700-001-07-38
2	1	3/4" x 6" Copper Tube, Conserver XL (Starting with S/N 04D10286)	5700-011-37-55
2	1	3/4" x 6" Copper Tube, Conserver XL2	5700-011-37-55
3	1	3/4" NPT, Close Brass Nipple, Conserver XL (Prior to S/N 04D10286)	4730-207-34-00
3	1	3/4" NPT x 3" Nipple, Conserver XL (Starting with S/N 04D10286)	4730-011-38-29
3	1	3/4" NPT x 3" Nipple, Conserver XL2 Series	4730-011-38-29

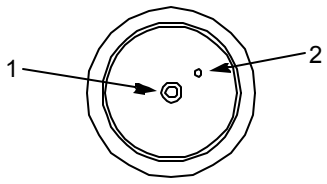
3/4" SOLENOID VALVE & 3/4" NPT VACUUM BREAKER REPAIR PARTS KITS

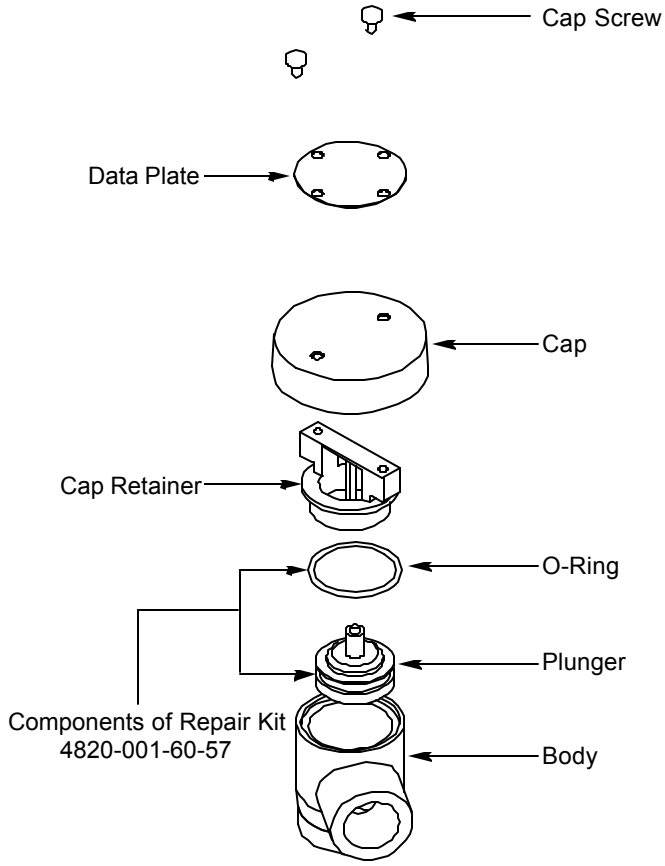


Complete 110 Volt Solenoid Valve Assembly
4810-100-53-00
Coil & Housing only
4810-200-01-18

Complete 240 Volt Solenoid Valve Assembly
4810-100-03-18
Coil & Housing only
4810-200-02-18

Possible Problems:
1. Pilot port extension #1 clogged. Clean hole.
2. Hole #2 Clogged. Pass heated straight pin through hole.





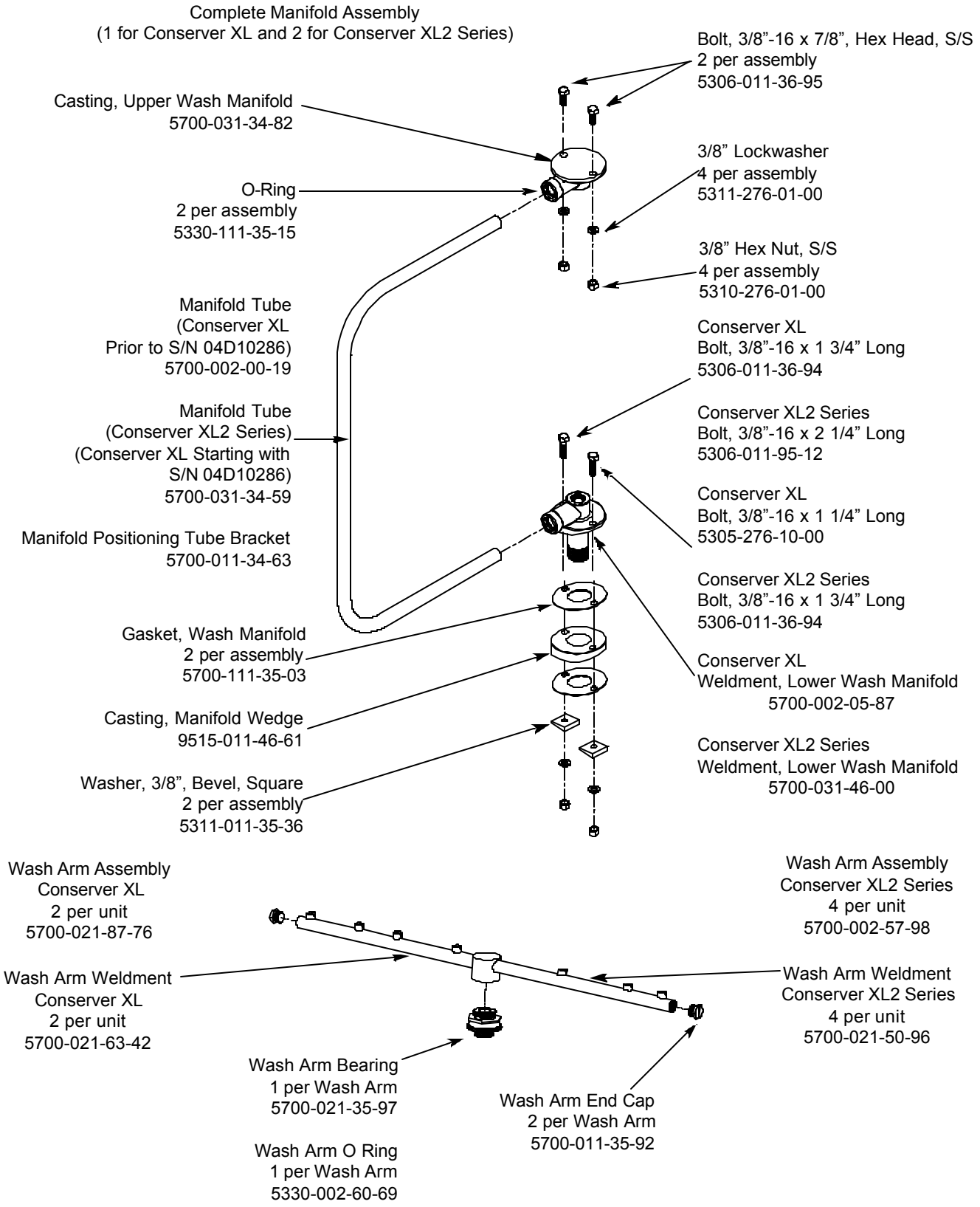
Complete Vacuum Breaker Assembly
4820-002-53-77

TO TAKE THE SOLENOID VALVE APART

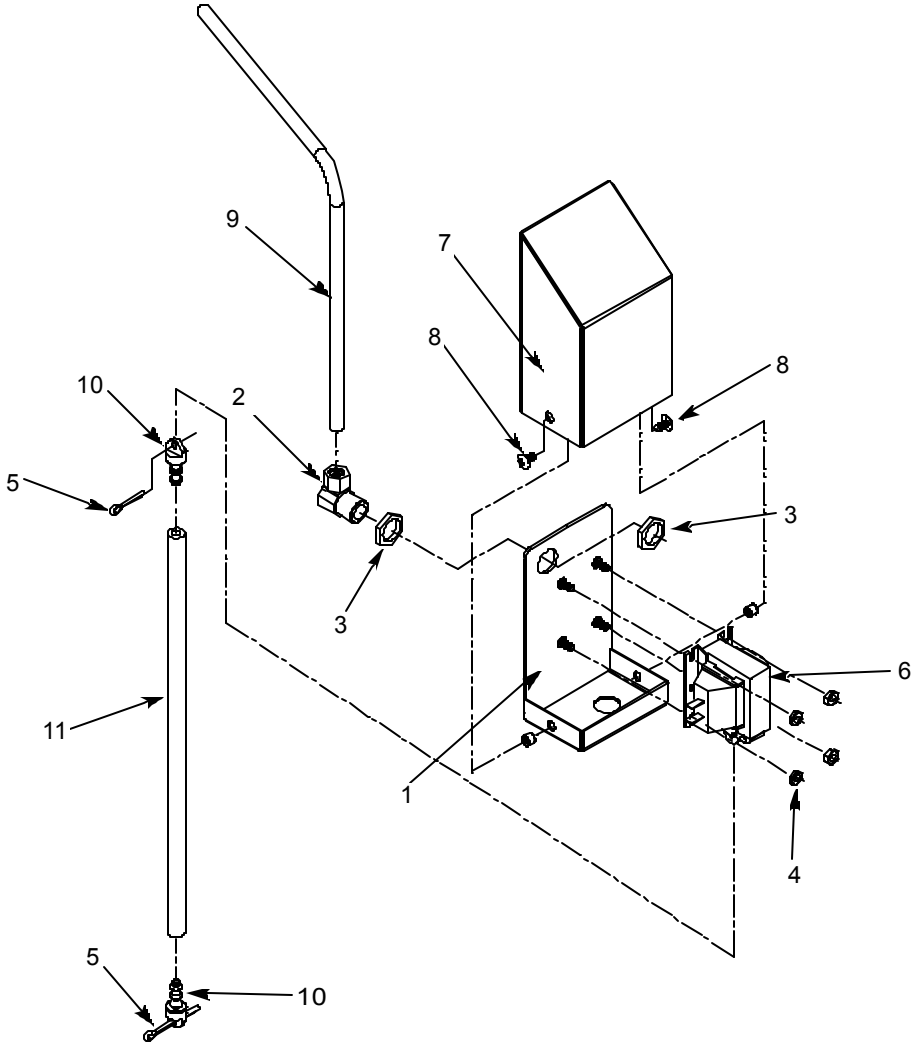
DISASSEMBLY - These valves may be taken apart by unscrewing the bonnet and the enclosing tube assembly from the valve body assembly. After unscrewing, carefully lift off the bonnet and enclosing tube assembly. Don't drop the plunger. The o-ring seal and diaphragm cartridge can now be lifted out. Be careful not to damage the machined faces while the valve is apart.

TO REASSEMBLE - Place the diaphragm cartridge in the body with the pilot port extension UP. Hold the plunger with the synthetic seat against the pilot port. Make sure the o-ring is in place, then lower the bonnet and enclosing tube assembly over the plunger. Screw the bonnet assembly snugly down on the body assembly.

WASH MANIFOLD ASSEMBLY

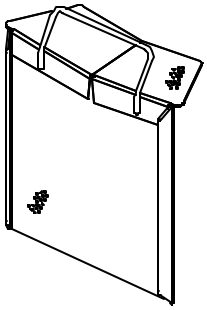


DRAIN SOLENOID ASSEMBLY



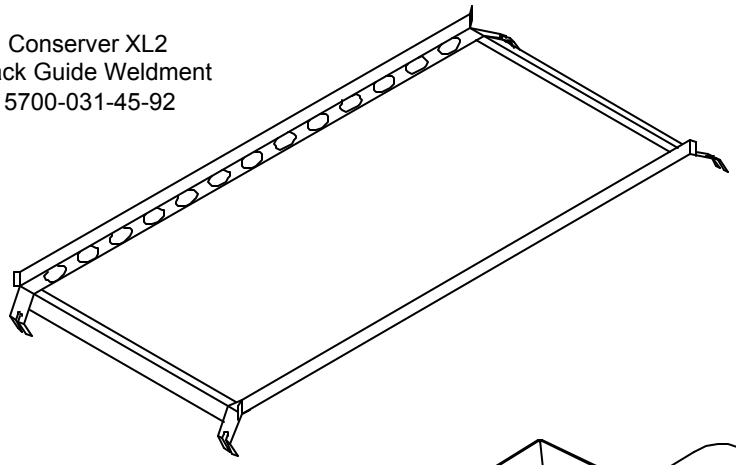
ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Solenoid Bracket Weldment, Conserver XL (Prior to S/N 04D10286)	5700-002-05-91
1	1	Solenoid Housing Weldment, Conserver XL (Starting with S/N 04D10286)	5700-002-79-29
2	1	Elbow, 3/8" Tube x 3/8"-18 NPT	4730-206-23-00
3	2	Locknut, Brass, 3/8"-18 NPT	5700-000-66-01
4	4	Locknut, 10-24 S/S Hex with Nylon Insert	5310-373-01-00
5	2	Cotter Pin, 3/32 x 3/4" Long	5315-207-01-00
6	1	Drain, Solenoid, 115 V	4810-200-11-00
6	1	Drain, Solenoid, 240 V	4810-002-20-87
7	1	Cover, Solenoid Weldment	5700-002-05-90
8	2	Screw, 10-24 x 3/8", Phillips Head	5305-173-03-00
9	1	Solenoid Conduit,Conserver XL (Prior to S/N 04D10286)	5700-002-04-55
9	1	Solenoid Conduit,Conserver XL (Starting with S/N 04D10286)	5700-002-92-47
10	2	Hose Eye	5700-002-05-61
11	1	Hose, Plunger Link	5700-002-05-70

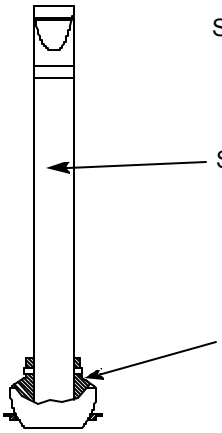
MISCELLANEOUS PARTS



Conserver XL2
Intake Pump Strainer Weldment
5700-031-45-26

Conserver XL2
Rack Guide Weldment
5700-031-45-92

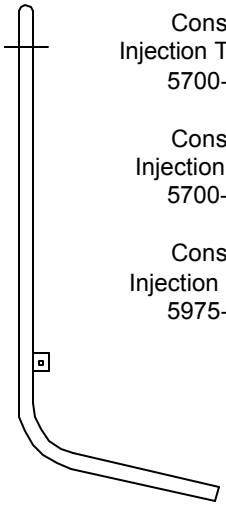




Stand Pipe Assembly
5700-031-35-55

Stand Pipe Weldment
5700-021-33-29

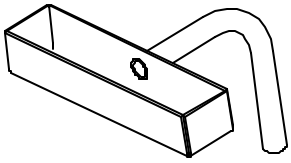
Stand Pipe Stopper
5700-021-33-54



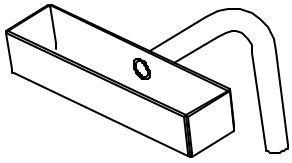
Conserver XL2
Injection Tube Weldment
5700-002-21-52

Conserver XL2
Injection Tube Gasket
5700-011-45-36

Conserver XL2
Injection Tube Bushing
5975-002-47-54

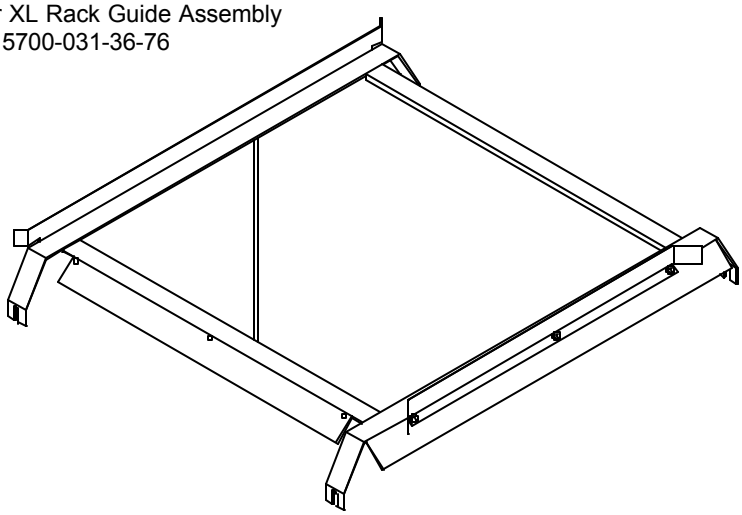


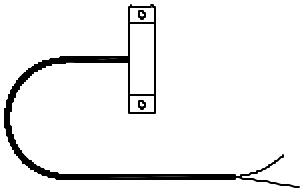
Front Switch Box Weldment
Conserver XL2 Series Only
1 per machine
5700-002-21-53



Conserver XL2
Side Switch Box Weldment
1 per machine
5700-002-47-20

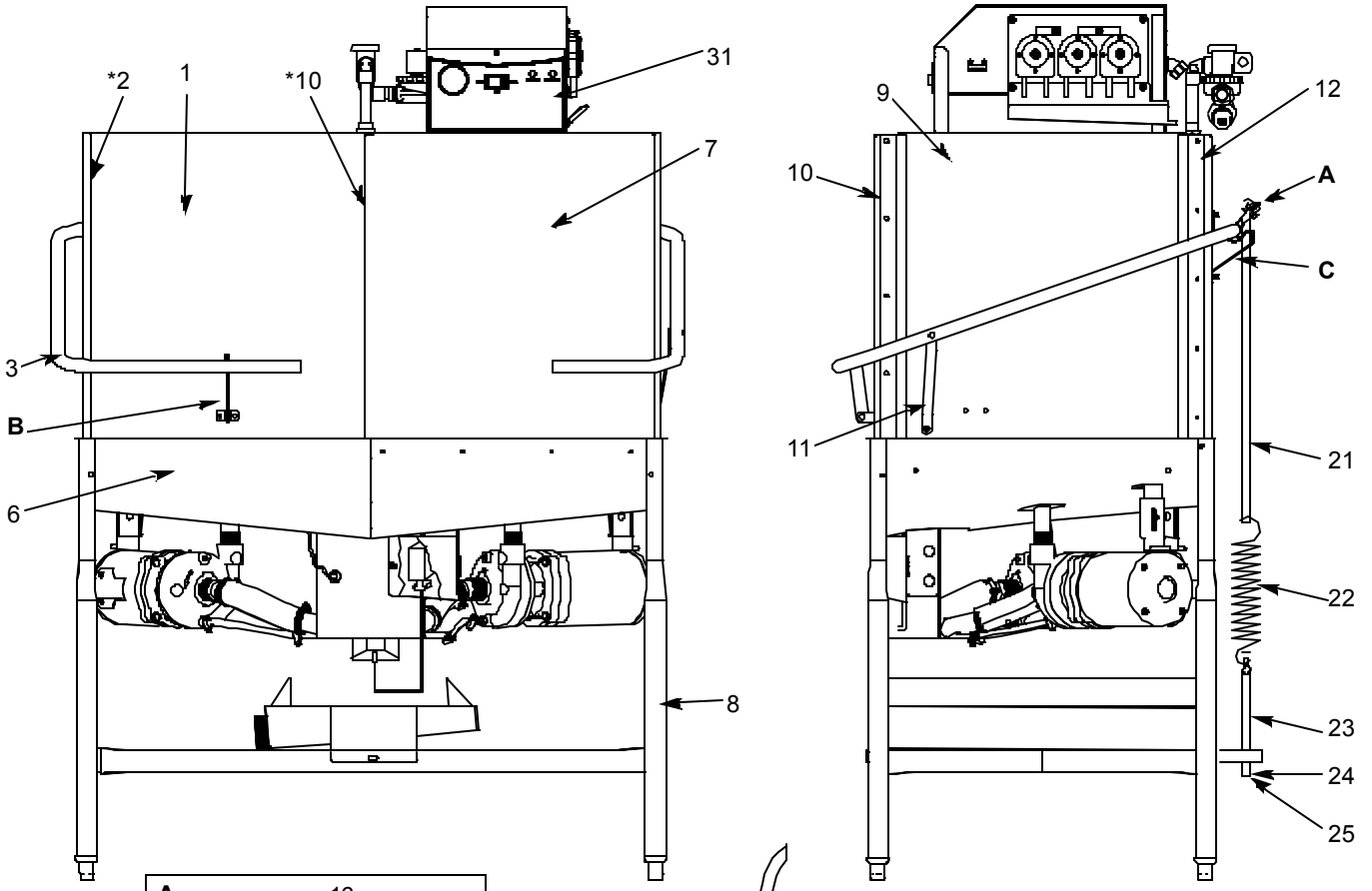
Conserver XL Rack Guide Assembly
5700-031-36-76

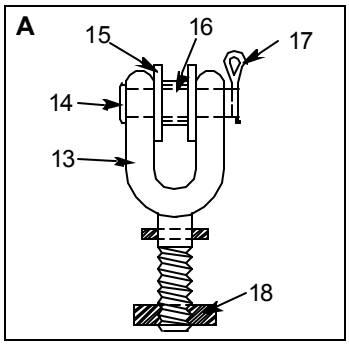




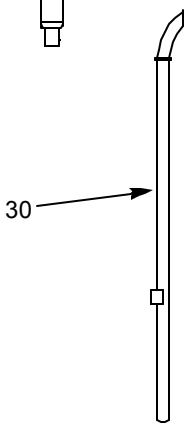
Reed Switch
1 per machine
5930-111-41-70

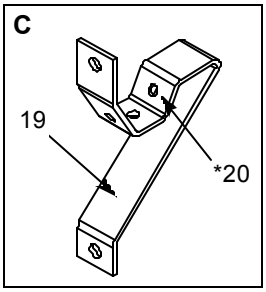
CONSERVER XL2-CML ASSEMBLY OPTIONS

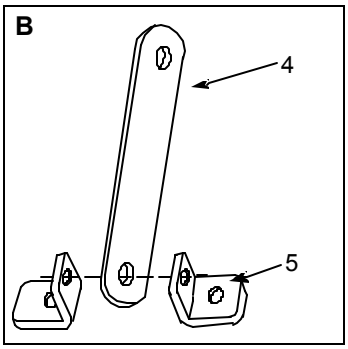


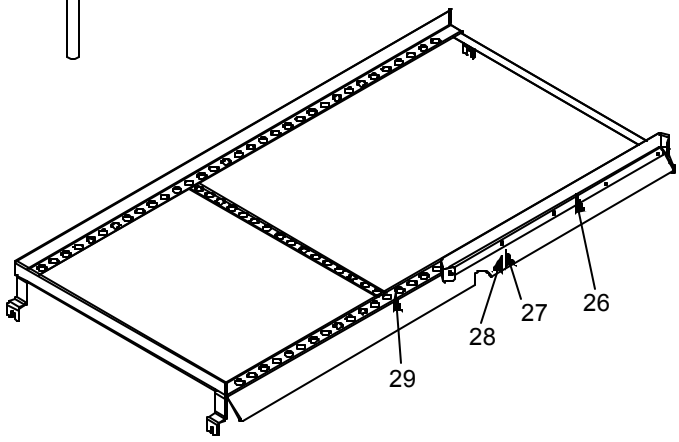


YOKE ASSEMBLY







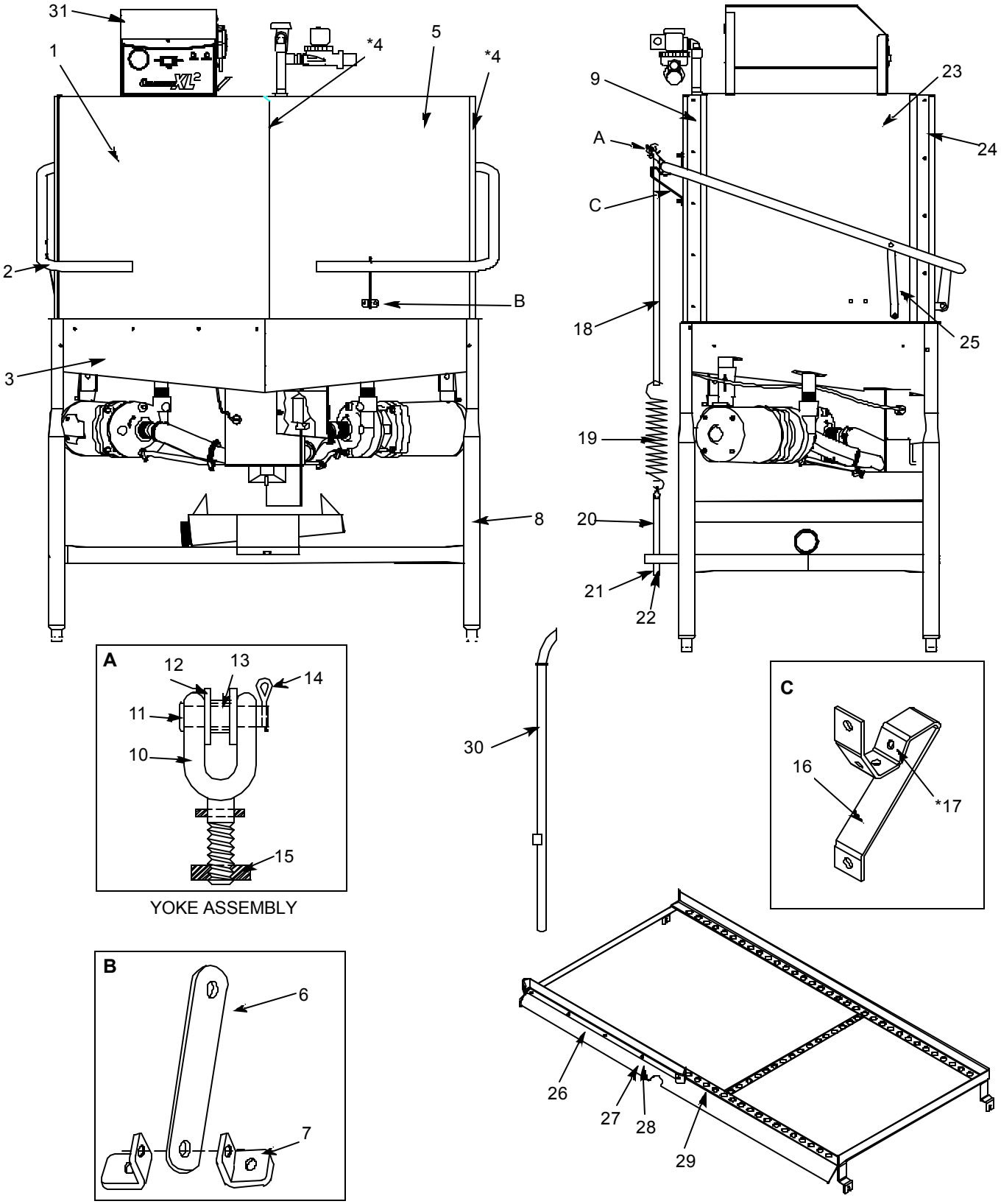


CONSERVER XL2-CML ASSEMBLY OPTIONS (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Front Door Assembly	5700-002-08-59
	1	Front Door	5700-002-07-31
	2	Door Glides UHMW	5700-111-33-59
2	1	Inner Door Guide	5700-002-07-21
3	1	Cantilever Arm Assembly	5700-002-07-69
	1	Cantilever Arm Weldment	5700-002-09-14
	2	Plug	5340-011-35-00
	2	Spring Pin, 1/4" Dia. X 1 1/8" Long	5315-407-06-00
	2	Yoke Assembly	5700-000-75-77
4	1	Hinge, Slotted	5700-002-07-39
5	2	Front Door Bracket	5700-002-07-37
6	1	Tub Weldment	5700-002-72-64
7	1	Hood Weldment	5700-002-72-67
8	1	Frame Weldment	5700-002-61-22
9	1	Right Door Assembly	5700-002-08-63
	1	Right Door Weldment	5700-002-08-61
	2	Door Glides UHMW	5700-111-33-59
	1	Magnet, Reed Switch	5930-111-51-68
	2	Locknut, 8-32 Hex, with Nylon Insert	5310-272-02-00
10	2	Front Door Guide	5700-021-44-94
11	1	Bracket, Side Door Connecting	5700-002-07-33
12	1	Right Rear Door Guide	5700-021-84-70
A		Yoke Assembly	5700-000-75-77
13	1	Yoke	5700-000-75-78
14	1	Pin, Clevis 5/16" x 1 3/8"	5315-700-01-00
15	2	Washer, Nylon	5311-369-03-00
16	1	Bushing	3120-100-03-00
17	1	Cotter Pin, 3/32" x 3/4"	5315-207-01-00
18	1	Nut, 3/8"-16 S/S, Center Locknut	5310-256-04-00
19	2	Bracket, Canitlever Support	5700-031-88-00
20	6	Wear Button	5700-011-88-01
21	2	Spring Rod	5700-001-28-18
22	2	Spring	5340-109-02-00
23	2	Bolt, Hanger Eye	5306-956-05-00
24	2	Washer, Impeller	5311-176-02-00
25	4	Nut, Hex 3/8"-16 S/S	5310-276-01-00
		Rack Rail Assembly	5700-002-08-64
26	1	Rack Rail Weldment	5700-002-07-65
27	3	Locknut, 10-24 Hex, S/S, with Nylon Insert	5310-373-01-00
28	3	Screw, 10-24 x 1/2" Long S/S	5305-173-18-00
29	1	Guard, Front Track	5700-002-07-44
30	1	Chemical Feed Tube Weldment	5700-002-08-14
	1	Gasket, Chemical Feed Tube	5700-011-45-36
	1	Bushing, 3/4” Hole Snap	5975-002-47-54
31	1	Control Box Assembly	5700-002-54-35

* Represents an item not shown.

CONSERVER XL2-CMR ASSEMBLY OPTIONS



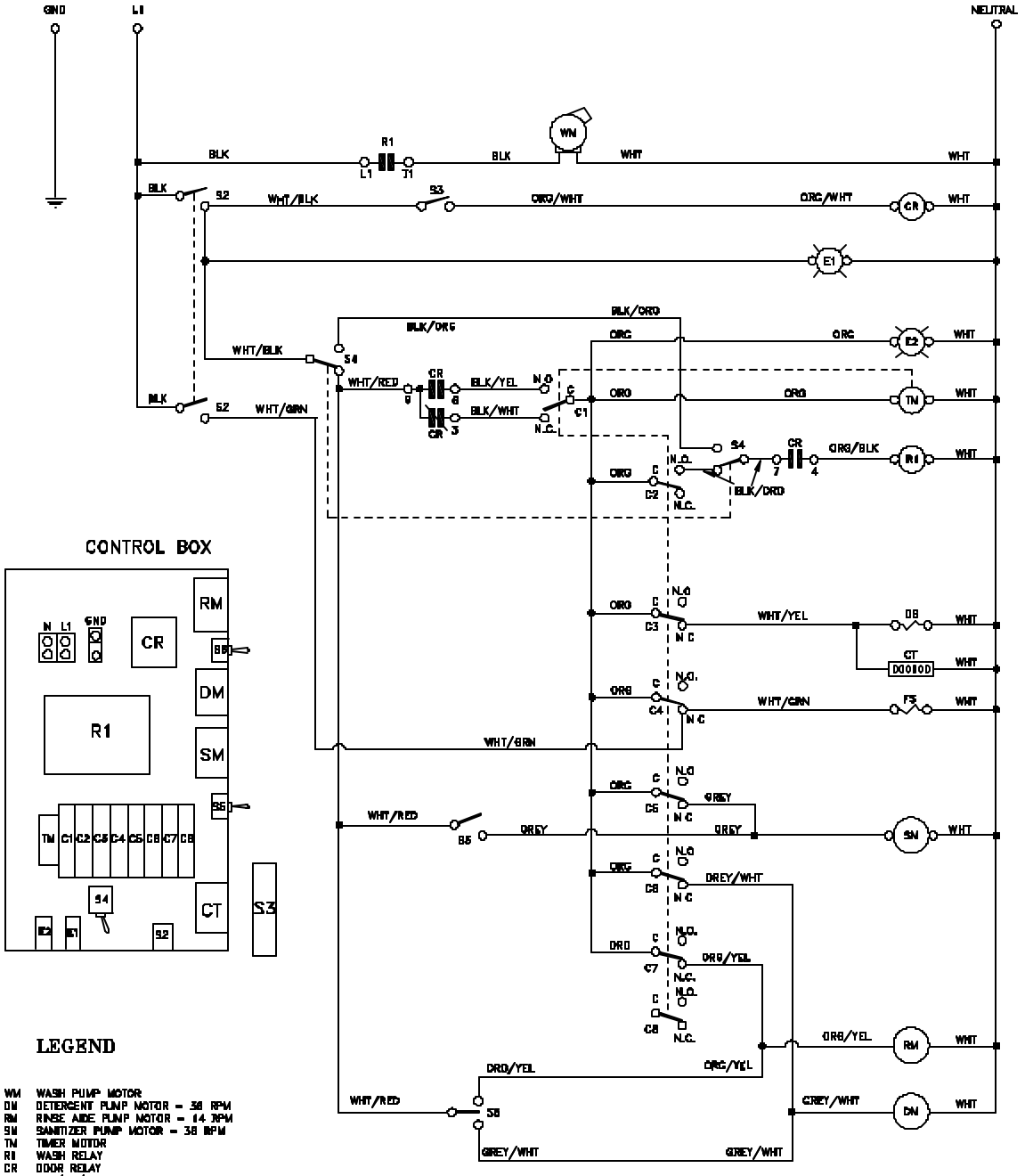
CONSERVER XL2-CMR ASSEMBLY OPTIONS (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Hood Weldment	5700-002-54-36
2*	1	Cantilever Arm Assembly	5700-002-07-70
	1	Cantilever Arm Weldment	5700-002-09-13
	2	Plug	5340-011-35-00
	2	Spring Pin, 1/4” Dia. x 1-1/8” Long	5315-407-06-00
	2	Yoke Assembly	5700-000-75-77
3	1	Tub Weldment	5700-002-54-34
4*	2	Inner Door Guide	5700-002-07-21
5	1	Front Door Assembly	5700-002-08-59
	1	Front Door	5700-002-07-31
	2	Door Glide, UHMW	5700-111-33-59
6	1	Hinge, Slotted	5700-002-07-39
7	2	Front Door Bracket	5700-002-07-37
8	1	Frame Weldment	5700-002-61-22
9	1	Left Rear Door Guide	5700-021-84-71
A		Yoke Assembly	5700-000-75-77
10	1	Yoke	5700-000-75-78
11	1	Pin, Clevis, 5/16” x 1-3/8”	5315-700-01-00
12	2	Washer, Nylon	5311-369-03-00
13	1	Bushing	3120-100-03-00
14	1	Cotter Pin, 3/32” x 3/4”	5315-207-01-00
15	1	Nut, 3/8”-16, SS, Center Locknut	5310-256-04-00
16	2	Bracket, Cantilever Support	5700-031-88-00
17*	6	Wear Button	5700-011-88-01
18	2	Spring Rod	5700-001-28-18
19	2	Spring	5340-109-02-00
20	2	Bolt, Hanger Eye	5306-956-05-00
21	2	Washer, Impeller	5311-176-02-00
22	4	Nut, Hex, 3/8”-16, SS	5310-276-01-00
23	1	Left Door Assembly	5700-002-08-84
	1	Left Door Weldment	5700-002-08-60
	2	Door Glide, UHMW	5700-111-33-59
	1	Magnet, Reed Switch	5930-111-51-68
	2	Locknut, 8-32 Hex with Nylon Insert	5310-272-02-00
24	1	Front Door Guide	5700-021-44-94
25	1	Bracket, Side Door Connecting	5700-002-07-33
		Rack Rail Assembly	5700-002-08-85
26	1	Rack Rail Weldment	5700-002-07-64
27	3	Locknut, 10-24 with Nylon Insert	5310-373-01-00
28	3	Screw, 10-24 x 1/2” Long SS	5305-173-18-00
29	1	Guard, Front Track	5700-002-07-44
30	1	Chemical Feed Tube Weldment	5700-002-08-14
	1	Gasket, Chemical Feeding Tube	5700-011-45-36
	1	Bushing, 3/4” Hole, Snap	5975-002-47-54
31	1	Control Box Assembly	5700-002-54-35

* Represents an item not shown.

SECTION 6:
ELECTRICAL SCHEMATICS

CONSERVER XL 115 VOLT - 60 HERTZ - SINGLE PHASE

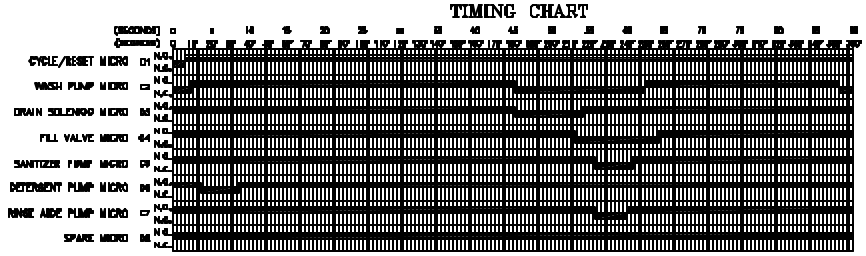


LEGEND

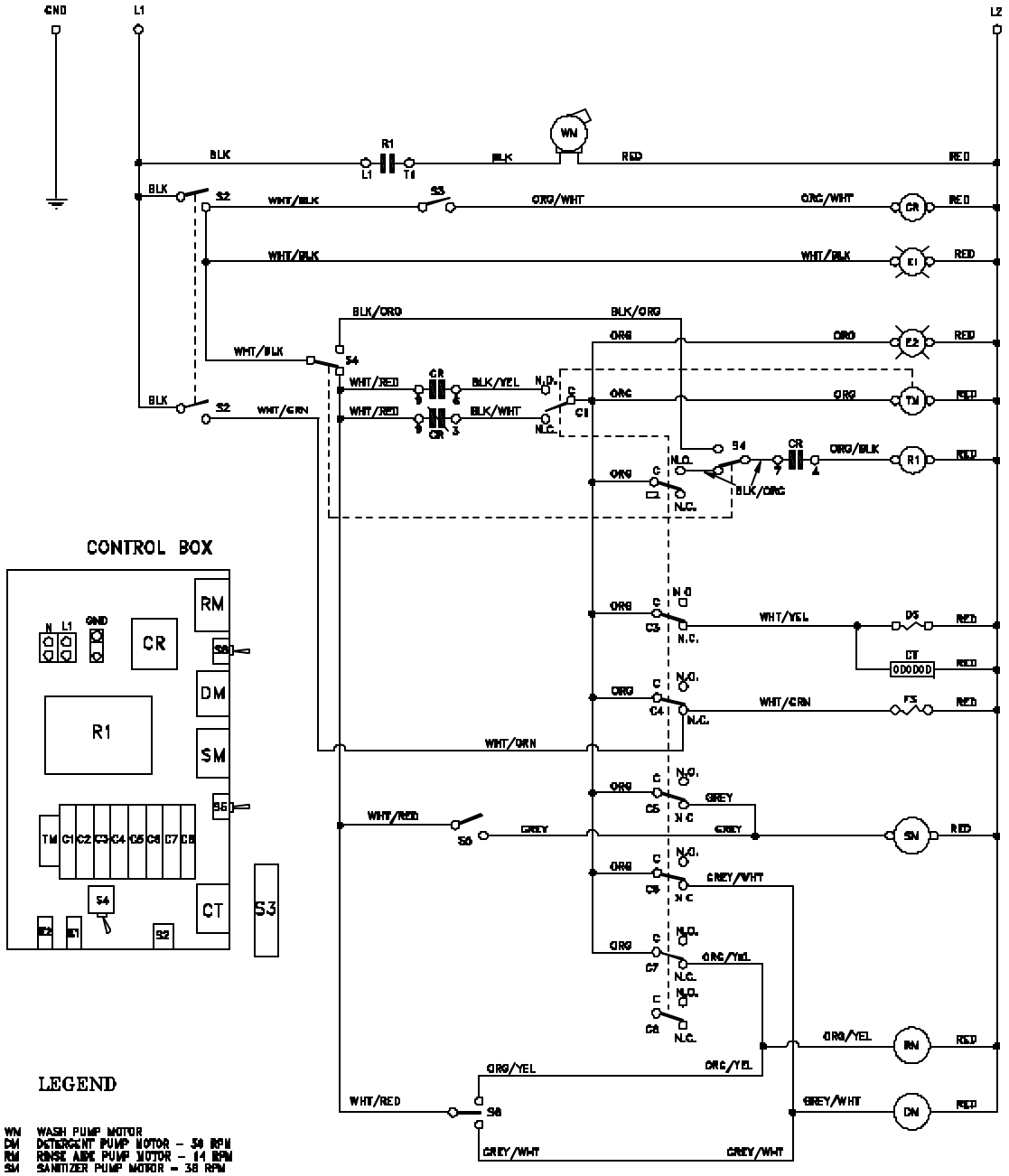
WM	WASH PUMP MOTOR
DM	DETERGENT PUMP MOTOR - 36 RPM
RM	RINSE AIDE PUMP MOTOR - 14 RPM
SM	SANITIZER PUMP MOTOR - 36 RPM
TM	TIMER MOTOR
RI	WASH RELAY
CR	DOOR RELAY
S2	OFF/ON/FILL SWITCH
S3	DOOR SWITCH
S4	DELIME SWITCH
S5	SANITIZER PRIME SWITCH
S6	DET/RIN PRIME SWITCH
E1	POWER LIGHT
E2	CYCLE LIGHT
DS	DRAIN SOLENOID
FS	FILL SOLENOID
C1	CYCLE/RESET MICROSWITCH
C2	WASH MICROSWITCH
C3	DRAIN MICROSWITCH
C4	FILL MICROSWITCH
C5	SANITIZER MICROSWITCH
C6	DETERGENT MICROSWITCH
C7	RINSE ADDITIVE MICROSWITCH
C8	SPARE MICROSWITCH
CT	COUNTER

9805-002-07-56

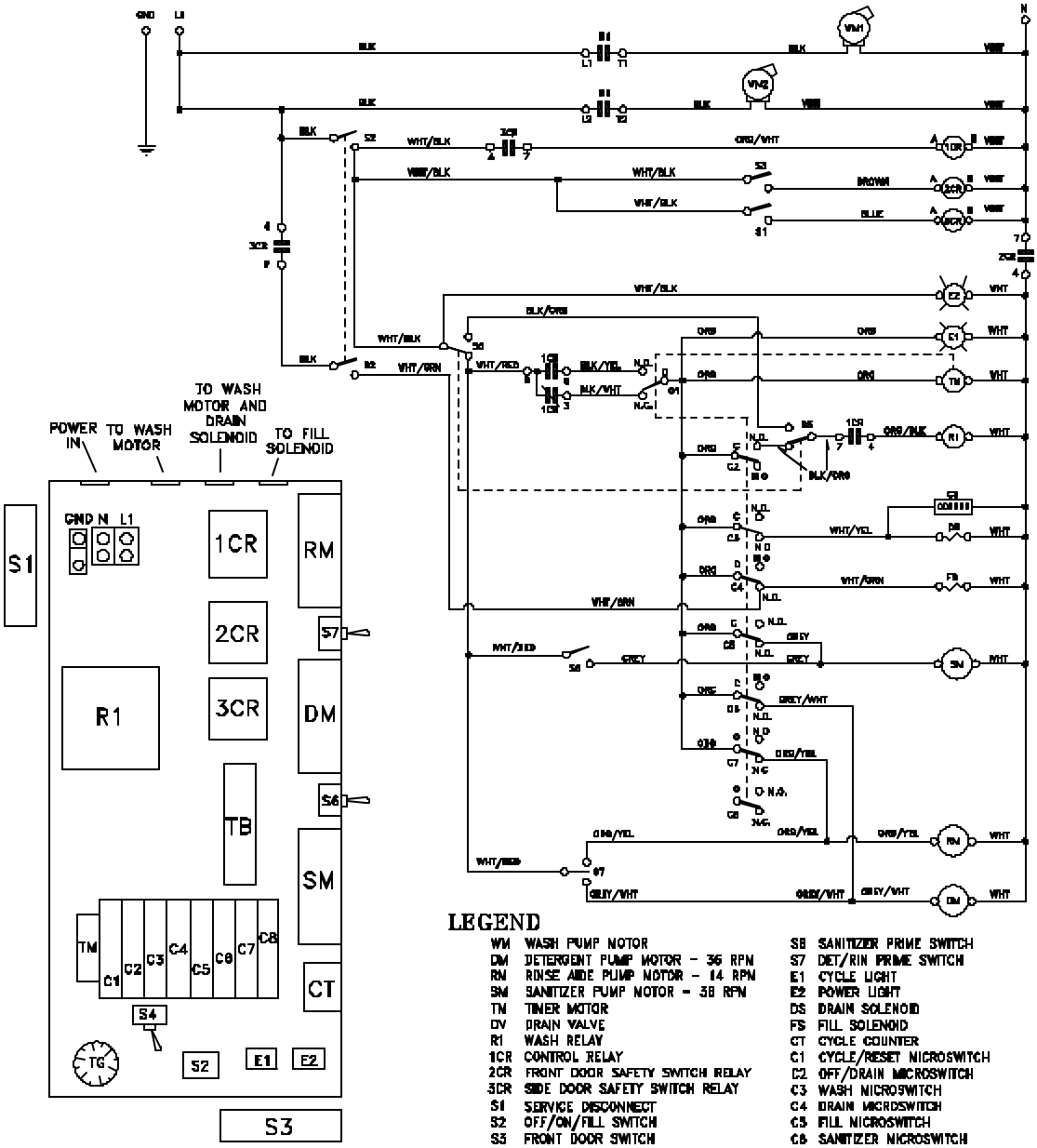
TIMING CHART



CONSERVER XL 220 VOLT - 50 HERTZ - SINGLE PHASE



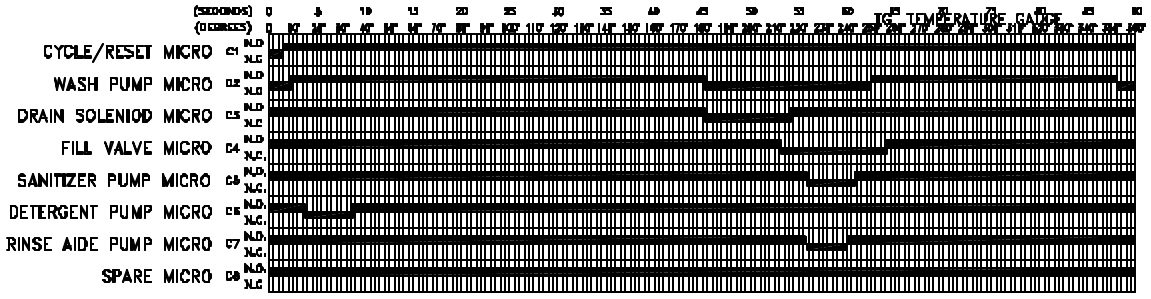
CONSERVER XL2 SERIES 115 VOLT - 60 HERTZ - SINGLE PHASE



LEGEND

WM	WASH PUMP MOTOR	S8	SANITIZER PRIME SWITCH
DM	DETERGENT PUMP MOTOR - 36 RPM	S7	DET/RIN PRIME SWITCH
RM	RINSE AIDE PUMP MOTOR - 14 RPM	E1	CYCLE LIGHT
SM	SANITIZER PUMP MOTOR - 36 RPM	E2	POWER LIGHT
TM	TIMER MOTOR	DS	DRAIN SOLENOID
DV	DRAIN VALVE	FS	FILL SOLENOID
R1	WASH RELAY	CT	CYCLE COUNTER
1CR	CONTROL RELAY	C1	CYCLE/RESET MICROSWITCH
2CR	FRONT DOOR SAFETY SWITCH RELAY	C2	OFF/DRAIN MICROSWITCH
3CR	SIDE DOOR SAFETY SWITCH RELAY	C3	WASH MICROSWITCH
S1	SERVICE DISCONNECT	C4	DRAIN MICROSWITCH
S2	OFF/ON/FILL SWITCH	C5	FILL MICROSWITCH
S3	FRONT DOOR SWITCH	C6	SANITIZER MICROSWITCH
S4	SIDE DOOR SWITCH	C7	DETERGENT MICROSWITCH
S6	DELIME SWITCH	C8	RINSE ADDITIVE MICROSWITCH

TIMING CHART



9905-002-23-33